THE GENESEE FARMER.

Agriculture is the most Healthy and Honorable, as it is the most Natural and Useful pursuit of Man.

VOL. XI. ROCHESTER, N. Y.—SEPTEMBER, 1850. NO. 9.

VIRGINIA LANDS AND FARMING

Every one who aspires to be an intelligent cultivator of the soil, should know something of the climate and agricultural capabilities of all of the great farming States of the Union. Among these—from its central position, its noble rivers, fine harbors, and being on the Atlantic—Virginia, which has been the mother of so many States, has peculiar claims to the study of every American. It contains 61,352 square miles, or within a fraction of 40,000,000 acres. Vessels drawing fifteen feet of water, come up the Potomac to Washington and Georgetown. Vessels of considerable tonnage are seen at the cities of Richmond and Petersburgh. The canals up the James and Potomac rivers are already completed far into the interior, and are still being extended. From steamboat navigation on the Ohio to Norfolk, through the James River canal, will be about 500 miles. Every body knows that Virginia lies in the valley of the Ohio, as well as on the Atlantic ocean. A loaded canal boat at Portsmouth, which is the southern terminus of the Ohio canal, is over 1000 miles from the city of New York, via Cleveland, Buffalo, and the Erie canal; and its cargo must be reshipped twice in crossing lake Erie. By ascending the Kanawha and descending the James rivers, in Virginia, the ocean is reached in half the distance, and without breaking bulk. This canal is not yet completed. The canal from Cumberland to Alexandria, in the District of Columbia, will be in operation all the way by the first of August.

There are several important lines of railway now being constructed in Virginia, to facilitate travel and the transportation of agricultural produce to tide water; but we need not stop to name them. It may not be amiss, however, to remark that Norfolk has one of the finest harbors in the world; and that the Potomac, up to Washington city, is more of a *bay* or arm of the Chesapeake, than a *river*. Tide rises and falls some four feet, and the river above the bridge is two miles wide. On the Virginia side of the Potomac is the farm of George Washington Parke Custis, the step-son and adopted child of the illustrious Pater Patriæ. This farm contains 1100 acres. We shall take another occasion to describe this fine estate and its farming operations. Its extensive meadows yield two tons of hay to the acre, an article which sells in Washington at from $15 to $20. Think of land within a few miles of the metropolis of the United States, (which is growing rapidly and must soon contain 100,000 inhabitants,) selling at from $7 to $12 an acre! Every acre of this land, with northern husbandry, will yield $30 worth of hay a year. The question may be asked why farming lands are so low in the "Ancient Dominion." This we will answer without fear or favor, according to our own views of the subject.

Forty years ago slaveholders in the State of New York had learned that negroes were worth more to grow tobacco in Virginia and Maryland, than to raise grain in the now Empire State. Obeying the laws of trade, thousands of slaves were carried south, and slaveholding ceased in New York and New Jersey. Now, two-thirds of the slaveholders of Virginia have learned that negroes are worth more to grow cotton, rice, and sugar, at the south, than tobacco and grain farther north. Obeying still the law of demand and supply, thousands of slaves are annually leaving Virginia, and migrating south to grow cotton, sugar, and rice, for the civilized world. Constantly hearing of the fortunes made in Georgia, Alabama, Mississippi, Louisiana, Florida, and Texas, the most enterprising planters of Virginia are leaving their partially exhausted estates for the El Dorado of a warmer climate, where slave labor is worth *two prices*. Can it be otherwise than that the millions of deserted acres in the Old Dominion should be offered to the enterprize of free labor at mere nominal prices?

If all the women in the world insist on having twice as many yards in each calico dress as formerly, and twice as many dresses in the course of a year, who, pray, but Virginia slaves, are to raise cotton enough to supply this incalculable demand? The cotton mills of England alone exported over thirteen hundred million yards of cotton cloth last year, and one hundred and fifty million pounds of cotton yarn. Let the men of fifty who read this article, call to mind how sparingly sugar was used when they were boys, and then reflect a moment on the way in which poor people, as well as rich, now consume this product of slave labor. So rapid has been the extension of commerce, and so great the improvements in the machinery for ginning and the manufacture of cotton, that the world wants, or affects to want a world of cotton fabrics. In short, the day is near at hand when all the slaves in this Republic will either cease to be bondmen, or be employed in the culture of the three great southern staples, cotton, sugar, and rice. Who, then, are to cultivate the northern slave-holding States? Who plant thousands of

wealth-giving orchards? Who grow wool and hemp, mules and horses, cattle and hogs, and make butter and cheese, wheat and corn, in the best climate in America? It will be freemen, happily exempt from all the peculiar cares and untold vexations incident to, and inseparable from, the relation of master and slave.

It is a great mistake to suppose that a farmer is thought the less of at the south, in any State, if perchance he tills his fields with his own hands. Mr. TOOMBS, a member of Congress from Georgia, and himself a wealthy planter, says that one-fourth of all the cotton grown in that State is planted, hoed, picked, ginned, and put up for market, by free white laborers. It is a law of Providence, and one not easily evaded anywhere, that man, whether bond or free, "shall eat bread in the sweat of his face." Citizens that care not to own slaves, but seek to realize an independent living by their own industry, or by hiring help, may do so in Virginia quite as well as in New York. As a general thing, the soil in the former State is not rich, but it is susceptible of easy improvement. It lacks lime more than any other element of crops. There are, however, extensive districts of fair wheat lands, and corn is grown in all parts of the State. Rotation of crops and the art of making money by the dairy business and wool-growing, are little thought of, and less practiced. The climate and the almost spontaneous growth of the best grasses, favor sheep-husbandry and stock-growing of all kinds. The finest sheep that we have ever seen are brought into Washington from Virginia. Col. WARE, of Clarke county, has left with the writer, in the Patent Office, samples of wool from an imported ram, which clips 18 lbs. of wool a year, and weighs 420 pounds. His fat wethers sell readily at from $25 to $35 a head. Being a gentleman of fortune, he buys, regardless of price, the prize rams and ewes at the Royal Agricultural Fair in England, nearly every year; and seeks mutton sheep and long, combing wool.

The demand for good roadsters, not race-horses, is most encouraging to the breeders of this noble animal.

To the man of small means, *fruit culture* promises the largest and surest profit. From the Potomac to the Rio Grande, the consumption of good apples will be limited only by the supply. Pears, peaches, grapes, quinces, plums, cherries, and berries of all kinds, are scarce and high.

The annual expenditure of several millions in this District, (Columbia) by the general government, and the drawing to a focus of so many gentlemen of wealth, and their families, from so vast an empire, operate greatly in favor of skilful farmers and gardners in this neighborhood. Both land and manure are cheap and abundant. It is said, (we know not with what truth,) that the one hundred square miles, or ten miles square, do not contain over one thousand slaves, and these are nearly all house-servants.

Instead of migrating to the far off outskirts of the Republic, her enterprising sons had better come and settle down near her pulsating heart, and reap all the advantages of the best markets on the continent. A thousand dairies can not supply butter and cheese to the cities of Baltimore, Washington, Alexandria, Georgetown, and to the planters engaged in growing tobacco and other crops. Why bring butter five hundred miles south, when it can be better made within an hour's drive of the consumer? We have seen better butter sold in Ohio at six cents a pound, than sells for thirty-one cents in Washington. On the 4th of July potatoes sell at a dollar and a half a bushel. In this climate they should be abundant at a third of the money, at this season of the year.—Garden vegetables are abundant, and generally good; but the supply does not last as skill in the keeping of them would effect, provided skill was possessed by the growers of these perishable commodities. How to keep potatoes, cabbage, beets, carrots, turnips, onions, apples and other fruit, is a science of great importance to all house-keepers. The warmer the climate, the greater the difficulty, and the larger the profit to those that study and master the art. It is knowledge, more than land, that we all lack; although we are apt to crave many acres, while we begrudge the appropriation of a few dollars to purchase the most useful books.

In Virginia, agricultural skill and rural science may command a liberal reward, because the field is large and the laborers few. Prejudice alone keeps honest, enterprising farmers of small means, from growing hay at fifteen dollars a ton on land worth from five to ten dollars an acre, which is now vacant. Potatoes and butter sell at three prices, because it is two small business for planters to produce them. Such defective tillage and husbandry can not long endure, and those that make judicous selections of land in Virginia now, may do better than the best did in New York forty years ago. Negroes are going where their labor is most profitable.

PATENT OFFICE REPORT.—Part II.

CULTURE OF INDIAN CORN.—(ZEA MAYS.)

Of the whole family of cereals, *Zea Mays* is unquestionably the most valuable for cultivation in the United States. When the time shall come that population presses closely on the highest capabilities of American soil, this plant, which is a native of the New World, will be found greatly to excel all others in the quantity of bread, meat, milk, and butter which it will yield from an acre of land. With proper culture, it has no equal for the production of hay, in all cases where it is desirable to grow a large crop on a small surface.

The report of the Ohio Board of Agriculture for 1849, for a copy of which we are indebted to M. B. BATEHAM, Esq., editor of the Ohio Cultivator, contains many interesting statements in reference to corn culture, made by the officers of numerous county agricultural societies. In Miami county 2,030,670 bushels were grown, at an average yield of fifty-five bushels per acre. Three varieties are cultivated: the common gourd seed, for cattle; the yellow Kentucky, for hogs and distilling; and the white, for grinding and exportation. According to the returns from Greene county, which produced 1,250,000 bushels of corn in 1849, "a regular rotation of clover, corn, wheat, and clover again, is best for corn; and no crop pays better for extra culture." The Harrison County Agricultural Society reports the pork crop at 4,800,000 pounds; and it gave its first premium for corn to Mr. S. B. LUKENS, whose statement is as follows:

"The ground had been in meadow ten years; was plowed six inches deep about the middle of April; was harrowed twice over on the 9th May, and planted on the 11th, four feet by two feet. It came up well; was cultivated and thinned when ten inches high; three stalks were left in a hill. About two weeks

afterwards it was again cultivated, and the suckers pulled off. About the last of June it was again cultivated, making three times the same way, as it was laid off but one way.

Expense of culture, gathering, and cribbing, was	$17 10
Product 374¾ bushels, at 31¼ cents,	117 10
Profit on three acres,	$100 00"

The evidence on which a premium was awarded was such as should satisfy any one that three hundred and seventy-four bushels were grown on three acres of land, and at a cost not exceeding $17.10, delivered in the crib. This is producing corn at less than five cents a bushel.

Whether the statement be true to the letter or not, it shows conclusively the great value of a *rich soil* for making cheap corn. The Board of Agriculture estimate the crop of Ohio last year at 70,000,000 of bushels. Taking the United States as a whole, probably the crop of corn was never better than in the year 1849. One that has rich land needs only to plow it deep and well, plant in season, and cultivate the earth properly with the plow or cultivator, to secure the growth of a generous crop. On poor soils the case is very different.

To raise a good crop of corn on poor land, and at the least possible expense, requires some science and much skill in the art of tillage. Take the same field to operate in, and one farmer will grow one hundred bushels of corn at half the cost per bushel that another will expend in labor, which is money. It unfortunately happens that very skillful farmers are few in number, in comparison with those who have failed to study and practice all attainable improvements. Men who can grow maize on common soil, place the crop in a crib at from six to ten cents a bushel, and pay a fair price for the labor, need not go to school to learn the practical part of corn culture. There are, however, five or six States in the Union in which this is done. Mr. LUKENS, of Ohio, has told how they do it in that State; and the practice is very similar elsewhere. To produce cheap corn on poor land, one needs a clear understanding of what elements of the crop air and water will furnish, and what they can not supply. It should be remembered that the atmosphere is precisely the same over ground which yields one hundred bushels of corn per acre that it is over that which produces only five bushels per acre. Now, the whole matter which forms the stems, leaves, roots, cobs, and seeds of corn, where the crop is one hundred bushels per acre, is not part and parcel of the soil. A harvest equal to fifty bushels per acre can be obtained without consuming over ten per cent. of earth, as compared with the weight of the crop. No plant can imbibe more of the substance of the soil in which it grows, than is dissolved in water or rendered gaseous by the decomposition of mold.

The quantity of matter dissolved, whether organic or inorganic, during the few weeks in which corn plants organize the bulk of their solids, is small. From 93 to 97 parts in 100 of the dry matter in a mature, perfect plant, including its seeds, cobs, stem, leaves, and roots, are carbon (charcoal) and the elements of water. It is not only an important, but an exceedingly instructive fact, that the most effective fertilizers known in agriculture are those that least abound in the elements of water and carbon. The unleached, dry excrements of dunghill fowls and pigeons have five times the fertilizing power on all cereal plants that the dry dung of a grass-fed cow has, although the latter has five times more carbon, oxygen, and hydrogen,* per 100 pounds, than the former. Although it is desirable to apply to the soil in which corn is to grow as much of organized carbon and water as one conveniently can; yet, where fertilizers have to be transported many miles, it is important to know that so much of the manure as would form *coal*, if carefully burnt, can best be spared. The same is true of those elements in manure which form vapor or water, when the fertilizer decomposes in the ground.

Carbonic acid and nascent hydrogen evolved in rotting stable manure are truly valuable food for plants, and perform important chemical offices in the soil; but they are, nevertheless, not so indispensable to the economical production of crops, as *available nitrogen, potash, silica, magnesia, sulphur, and phosphorus.* These elements of plants being less abundant in nature, and quite indispensable in forming corn, cotton, and every other product of the soil, their artificial supply in guano, nightsoil, and other highly concentrated fertilizers, adds immensely to the harvest, through the aid of a small weight of matter. If a moiety of the elements of bread and meat, milk, fruit, and garden vegetables, annually consumed by the twenty-two millions of people in the United States, and then thrown away, were judiciously applied to the produce of grain crops, the yearly profits accruing would be many millions. In all sections where corn is worth thirty cents, and over, a bushel, great benefits may be realized by the skillful manufacture and use of poudrette. This article is an inodorous compound of the most valuable constituents of human food and clothing. It is the raw material of crops.

It is not necessary to restore to a corn field all the matter removed in the crop to maintain its fertility. A part of each seed, however, ought to be carried back and replaced in the soil, to make good its loss by the harvest.

In every barrel of meal or flour sent to market (196 pounds) there are not far from 186 pounds of carbon (coal) and the elements of water. When a bird eats wheat or corn, I have reason to believe, from several experiments, that over 80 per cent. of the food escapes into the air through its capacious lungs in the process of respiration; and yet, the 20 per cent. of guano left will re-produce as much wheat or corn as was consumed. Imported guano which has been exposed to the weather for ages, often gives an increase in the crop of wheat equal to three pounds of seed to one of fertilizer; while it has given a gain of seven to one of corn, and fifty to one of green turneps.

Chemists have ascertained that the air expelled from the lungs of man and his domestic animals in breathing, contains 100 times more carbonic acid than it possessed when it entered the organs of respiration.

While carbon or coal in bread, meat, potatoes, grass, hay, and straw, consumed by warm-blooded animals, is constantly passing out of the system as carbonic acid gas, the elements of water (oxygen and hydrogen) are also escaping from the lungs in the form of vapor, which in cold weather is often visible. Over 50 per cent. of the solids consumed by

* Oxygen and hydrogen form water, or are its elements.

man and beast is thus thrown into the atmosphere by a slow, continuous combustion, which generates animal heat. These elements of the farmer's crops fall upon his cultivated fields in rain and dew. Hence, when a pig, or any other animal, eats 100 pounds of corn, and voids by the bowels and kidneys 40 pounds of the matter consumed, these 40 pounds will reproduce, and generally more than reproduce, 100 pounds of corn again. Even this 40 per cent. of the elements of corn may be reduced one-half by skillful fermentation, by which carbon and the elements of water are still further removed, and then reproduce an amount of grain equal to the original. The art and science of feeding cultivated plants being discussed at length in another place, the subject will not be pursued in this connexion.

I am indebted to the valuable work of Professor EMMONS, published in two quarto volumes, entitled "Agriculture of New York," for the following and many other analyses contained in this report. The researches into the chemical composition of maize were performed by Mr. J. H. SALISBURY, in the laboratory of Professor E., and were so thorough and extensive as to induce the New York State Agricultural Society to award a premium of $300 to Mr. S. His investigations fill two hundred pages in the transactions of that society for the year 1848.

A corn plant fifteen days after the seed was planted, cut on the 3d of June, close to the ground, gave of

Water,	89.626
Dry matter,	10.374
Ash,	1.354
Ash calculated dry,	13.053

By the above figures it will be seen that nearly 90 per cent. of the young plant is water; and that, in proportion to the dry matter, the amount of earthy minerals which remain as ash when the plant is burnt, is large. This excess of water continues for many weeks. Thus, on the 5th of July, thirty-three days from planting, the relations stood thus:

Water,	90.513
Dry matter,	9.482
Ash,	1.333
Ash calculated dry,	14.101

(Ash very saline.)

Before green, succulent food of this character is fit to give to cows, oxen, mules, or horses, it should be partly dried. Plants that contain from 70 to 75 per cent. of water need no curing before eaten. The young stalk, cut July 12, gave over 94 per cent. of water. Such food used for soiling without drying, would be likely to scour an animal, and give it the cholic. The root at this time (uly 12) gaJve of

Water,	81.026
Dry matter,	18.974
Ash,	2.222
Ash calculated dry,	11.711

(Ash tastes of caustic potash.)

Ash of the whole plant above ground, 6.77 grains. Amount of ash in all below ground, 3.93 grains.

So late as July 26, the proportion of water in the stalk was ninety-four per cent.; and the ash calculated dry, 17.66 per cent. The plant gained 2136.98 grains in weight in a week preceding the 6th of September. This was equal to a gain of 12.72 grains per hour.

The rapid growth of corn plants, when the heat, light, and moisture, as well as the soil, are favorable, is truly wonderful. A deep, rich, mellow soil, in which the roots can freely extend to a great distance in depth and laterally, is what the corn-grower should provide for this crop. The perviousness of river bottoms contributes largely to their productiveness of this cereal. A compact clay, which excludes alike air, water, and roots—forbidding all chemical changes—is not the soil for corn.

When farmers sell corn soon after it is ripe, there is considerable gain in not keeping it long to dry and shrink in weight. Corn grown by Mr. SALISBURY, which was ripe by the 18th of October, then contained 37 per cent. of water, which is 25 per cent. more than old corn from the crib will yield. The mean of many experiments tried by the writer has been a loss of twenty per cent. in moisture between new and old corn. The butts of cornstalks contain the most water, and husks or shucks the least, when fully matured and not dried. The latter have about thirty per cent. of dry matter when chemically desiccated.

COMPOSITION OF THE ASH OF THE LEAVES AT DIFFERENT STAGES.

	July 19.	Aug. 2.	Aug. 23.	Aug. 30.	Oct. 18.
Carbonic acid,	5.40	2.850	0.65	3.50	4.050
Silica,	13.50	19.850	34.90	36.27	58.650
Sulphuric acid	2.16	1.995	4.92	5.84	4.231
Phosphates,	21.60	16.250	17.00	13.50	5.850
Lime,	.69	4.035	2.00	3.38	4.510
Magnesia,	.37	2.980	1.59	2.30	0.865
Potash,	9.98	11.675	10.85	9.35	7.333
Soda,	34.39	29.590	21.23	22.13	8.520
Chlorine,	4.55	6.020	3.06	1.63	2.664
Organic acids,	5.50	2.400	3.38	2.05	2.200
	98.14	97.750	98.187	99.83	99.334

The above figures disclose several interesting facts. It will be seen that the increase of silica or flint in the leaf is steadily progressive from 13.50 per cent. at July 19th, to 58.65 at October 18th.

Flint is substantially the *bone-earth* of all grasses. If one were to analyze the bones of a calf when a day old, again when thirty days of age, and when a year old, the increase of phosphate of lime in its skeleton would be similar to that witnessed in the leaves and stems of maize. In the early stages of the growth of corn, its leaves abound in phosphates; but after the seeds begin to form, the phosphates leave the tissues of the plant in other parts, and concentrate in and around the germs in the seeds. On the 23d of August, the ash of the whole stalk contained 19.50 per cent. of phosphates; and on the 18th of October, only 15.15 per cent. In forming the cobs of this plant, considerable potash is drawn from the stalk; as it decreases from 35.54 per cent. August 16, to 24.69 October 18. When the plant is growing fastest, its roots yield an ash which contains less than one per cent. of lime; but after this development is nearly completed, the roots retain, or perhaps regain from the plant above, over 4½ per cent. of this mineral. Soda figures as high as from 20 to 31 per cent. in the ash obtained from corn roots. Ripe seeds gave the following results on the analysis of their ash:

Silica,	0.850
Phosphoric acid,	49.210
Lime,	0.075
Magnesia,	17.600
Potash,	23.175
Soda	3.605
Sodium,	0.160
Chlorine,	0.295
Sulphuric acid,	0.515
Organic acids,	5.700
	99.175

The above table shows a smaller quantity of lime

than is usually found in the ash of this grain. It is, however, never so abundant as magnesia; and Prof. EMMONS has shown that the best corn lands in the State of New York contain a considerable quantity of magnesia. All experience, as well as all chemical researches, go to prove that *potash* and phosphoric acid are important elements in the organization of maize. Corn yields more pounds of straw and grain on poor land than either wheat, rye, barley, or oats; and it does infinitely better on rich than on sterile soils. To make the earth fertile, it is better economy to plant thick than to have the rows five feet apart each way, as is customary in some of the southern States, and only one stalk in a hill. This gives but one plant to twenty-five square feet of ground. Instead of this, three square feet are sufficient for a single plant; and from that up to six, for the largest varieties of this crop.

Much has been written in the agricultural journals of the country on the propriety of thin and thick planting. Among the advocates of the latter system Dr. M. W. PHILIPS, of Mississippi, has become conspicuous and is understood to be a successful grower of this great American staple. If one has not a deep, mellow soil on which to grow corn, it will pay well to form such a soil by deep plowing, turning in green crops, and draining, if necessary. Few farmers have ever made themselves rich by raising corn on poor land. There is vastly too much of unproductive soils plowed and hoed in the United States. This practice is bad economy; for it impoverishes the earth, without enriching either the agriculturist or the community. It is so much cheaper to grow 100 bushels of corn on two than on ten acres, that a general effort should be made to bring all corn lands up to the average of 50 bushels per acre.

A writer in the Maine Farmer estimates the quantity of southern and western corn annually imported into that State, for home consumption, at 3,000,000 of bushels. No other population three times as large out of the United States consumes an equal amount of American corn. Maine is a great ship-building and lumber-producing State, which makes her an excellent customer for the grain and meat-growing districts of the Union. The demand for ships, breadstuffs, provisions, ready-made houses, farm implements, and wearing apparel of every kind, for the California trade and market, is operating very sensibly on the agricultural interests of the country. The more its labor becomes diversified, the less danger there is of over-producing any one important crop like that of corn, cotton, or wheat. It will not do for the productive industry of five millions of agriculturists to be constantly employed on a few leading crops, unless the design is to give a great deal of work for a very little pay, and impoverish the land at the same time.

CALF STORY AGAIN. — *Eds. Gen. Farmer:*—The calf noticed in your April number, weighing 150 lbs. when twelve hours old, was found to weigh, when two months old, 310 lbs. At four months old, his weight and measure were again taken, as follows: Weight, five hundred and eight pounds; height, four feet; girt, four feet seven inches; length from the horns to the root of the tail, five feet seven inches. He has the milk of one cow only, with pasture. His form as well as his size has been admired by numerous visitors, excelling any steer they have seen. M. HUTCHINSON.—*King's Ferry, N. Y.*, 1850.

SMUT IN WHEAT, AND THE CAUSE OF IT.

MESSRS. EDITORS:—As you and your correspondents have all "spoken pretty freely" in regard to my theory as to the cause of smut in wheat, it may be expected that I would at least take a passing notice of your objections and theirs; and as my "Old Farmer" friend, of "Oaklands," comes first to take "issue" with me, I will first pay my respects to his article, which being dated in March, must, I infer, have been written before the publication of the last part of my communication, which was not published until your April number came out. Not having seen the last or concluding part, I presume he had not an opportunity of drawing any fair "inferences" respecting the "soundness" of my philosophy in regard to this matter. Besides, as he says he has "never seen smut on his farm, except occasional ears of corn, or a few among his barley"—never in his wheat—I am at a loss how to account for his, as I think, rather positive assertions that smut in wheat "is a fungus, of the same nature as the mushroom"—that it "feeds on the juices of the plant, and destroys the structure of the grain to which it is attached." Has my friend had opportunities of examining it, personally, "under the lens of a microscope," by means of which he could fully ascertain and determine its vegetable character as a fungus plant? or has he based his assertions upon the phantastical imaginings of others, who, not having been practical farmers, probably had not even the limited opportunities and advantages possessed by my "Old Farmer" friend? But it appears to me that notwithstanding all his "sound philosophy" in regard to this matter, he is even doubtful as to the fact that "smut is a fungus;" for he says, "whatever may be the origin of this disease," &c. Now, if "we know it to be a fungus," it strikes me that there is really no propriety in saying "whatever" (or "be it this, or that," origin,) about it.

But let that pass; and allow me to ask my friend how he knows that this supposed "fungus" feeds on the juices of the plant? And if it does, how, or in what manner, (by simply "feeding on the juices," and only thereby diminishing the quantity,) it "destroys the structure of the grain, and changes it to smut?" My friend also says that "we can readily detect it as soon as it breaks forth from the sheath." I have examined a great number of heads immediately before, as well as immediately after, they "broke forth from the sheath;" but I was never able to detect smut until some time (several days) had elapsed after the head "broke forth"—sufficient time, at least, for *my bugs* (if you please) to have produced the effect which I charge upon them. In regard to some of my "Old Farmer" friend's "infallible remedies," he or I must be egregiously mistaken. I have tried very strong lime water as a remedy, by steeping my seed wheat in it twelve hours or more; and I know by experience, which I believe to be the best of teachers, that it did not prevent smut in the produce; nor did wetting the seed wheat and mixing it thoroughly with quick lime—having also tried that experiment. But if common salt brine is all-sufficient to destroy the seed of this villainous "fungus," why does my friend advise to "wash the seed first in pure water," and then "soak it in the brine?" These supposed remedial means may sometimes be serviceable by destroying the egg or maggot of the insect, contained in the smut grains in the seed, and thus (in cases where the insect does not come from

some other field or farm,) preventing, in whole or in part, the evil which would probably have occurred if the undestroyed eggs or maggots had been sown in the smut grains with the seed wheat. But, after the experience which I have had, it is not possible for me to believe that any remedial means, by washing, steeping, or other mode of preparing the seed wheat, will be found to be infallible.

Since the above was written, I have seen a second article from the pen of my "Old Farmer" friend, in which he appears to have made an attempt to account for the smut in wheat in a different manner from that contained in his first article. He now appears to be halting in a state of betweenity, or rather in a state of plurality, as not knowing which one of the many absurd theories published by the scores of very "scientific" authors who have *supposed* and *conjectured* in regard to this matter of smut in wheat. Sometimes appearing to be inclined to adopt one, and sometimes another, of those unfounded hypotheses, does he not involve himself in some degree of inconsistency when he says that "one characteristic (of the smut, as well as his other fungi plants,) is, tha' "they will not grow unless fed with *decaying animal* or *vegetable* matter," and afterwards gravely asks, "who shall say that *growing wheat* can not absorb through its pores or vessels, matter so minute that the unaided human eye can not detect it"? I understand him to say that "smut will not grow unless fed upon decaying matter." Does he mean to have it understood that he believes that smut finds "*decaying matter*" in "*growing wheat*," and that, too, as soon as the head breaks forth from the sheath? I should be much pleased if my "Old Farmer" friend would "define his position" more clearly, and let us know what he really believes to be the cause of smut in wheat.

In regard to the communication of "E. T.," of Batavia, I should not probably have thought the "game worth the candle," had he not, as I think, misrepresented me by saying that I "virtually admit that the grain has formed its shape" before it is changed to smut. If I understand myself rightly — and I think I do—no such admission can be found in my communication. In my third article I stated that the puncture by the insect "*probably* injures the small vessels which would otherwise supply the grains with their proper nourishment, (in whole or in part,) and causes an entire change in the substance of the grain." Also, that "my observations have convinced me that the change in the grain is produced after the earing or heading out, and *while the germ is expanding*," &c. I contend that even this language, fairly construed, would not lead one to suppose that I intended to convey the idea that the grain had "formed its shape," and that afterwards its substance was transmuted into something else; but that the puncture caused the change during the process of the formation of the substance of the grain. But if this language admits of doubt, yet in the latter part of my communication I stated the particular manner in which I supposed the insect produced the smut, as I thought, in perfectly clear and intelligent language. I refer him to that part, and request him to ferret out its meaning, if it is not so plain that "he that runs may read." "E. T." also objects to my theory because "he has never known the pea bug nor his [my] bug to change the pea or berry," &c. Is Mr. E. T. so conceited as to suppose that it is demonstrative proof that a thing is not done, or does not exist, because *he* did not know the fact! He asserts that "we farmers know that the grain of smut is globular." Now "I, for one," have not discovered that it is so; and, upon inquiry, I find that other farmers are as ignorant as I am in regard to the *globular* form of smut grains.

I confess, Messrs. Editors, that *after*, as well as before, I discovered the cause of smut, I did, in the simplicity of my heart, use means as preventive remedies; and it seems that "E. T.," after he supposed he had discovered the cause, was also green enough to use a preventive remedy in sowing only his first quality wheat. And I can not avoid the inference, that he must have been not a little verdant in forming and adopting the conclusion that the "*vitality*, not of the roots particularly, but of the *seed*, to be wanting sufficient to produce good wheat." Until I saw "E. T.'s" communication, I was not aware that seed which had lost, or was wanting in, its vitality, would grow at all; but we can not all see that a thing "looks very like a whale," although our friend may insist that it does. "E. T.," it would seem, was easily satisfied, having tried a single experiment only. But in his account of that, he has, I think, furnished almost irresistable proofs, corroborative of my theory. His third quality wheat being the latest sown, (for he says he "reserved an eighth of an acre to experiment on,") produced "nearly all smut and chess," with some heads with part smut and part wheat.

Now, if his theory be correct, this result seems to be (to say the least of it,) most marvelous, if not miraculous. His seed, which was "wanting in vitality sufficient to produce good wheat," did, however, *grow*, and produce good wheat, though of small size. But the want of vitality in the seed also produced heads with "part smut and part wheat!" This certainly appears to me to be one of the strangest freaks which nature ever indulged in. It surprises me to learn that seed "wanting *vitality* sufficient to produce good wheat," should *grow*, so as to produce smut or anything else. But I confess I should be much more astonished to learn that it would not only *grow*, but, by some "hocus pocus" operation, the sap, which I had always supposed circulated through the whole plant, like the blood in the human body, should so separate itself into parts as to make one grain *good* and another *bad*, in the same head! and that, too, in consequence of want of vitality *(life)* in the seed! Is not all this theory an absurdity? I must conclude that it is, and rest upon my own, which I think rationally accounts for the difference in the produce of the same heads, as well as for the formation of good flour and smut in the same grain, or kernel.

Messrs. Editors, I do not wish you to "regret the necessity"(?) which required you to notice and dissent from my views. I have too long been searching for the *truth* in this matter, to be now afraid of finding it. If I am in error, I shall certainly be much pleased to be convinced of it. You admit that there are numerous instances where insects produce remarkable changes in the growth and appearance of plants. You also say that "smut is so well known to be a parasitic fungus, which will grow as well without a bug as peas and wheat—that it is as philosophical to say that a skipper in a cheese made the cheese, as to say that the egg or maggot of a weevil or 'beetle' produces the food on which it subsists." Now, gentlemen, will you be so kind as to enlighten

my benighted understanding, by informing me what relation all this parade of words of "a skipper in a cheese making the cheese," &c., has to anything *fairly* deducible from the premises laid down in my communication? Allow me to request that you will again, more carefully, read that part of my communication relating to this matter, on page 84, in your April number, and then I think you will not again be so mistaken as to accuse me of the absurdity of asserting, or even supposing, that the egg or maggot of any weevil or "beetle" produced the food on which it subsisted.

Now, gentlemen, allow me to ask by what means you know that "smut is well known to be a parasitic fungus"? Did you ever see it as a vegetable seed, even "through a glass, darkly"? Did you ever properly test its vegetative power by planting it with or without wheat? Have you ever *personally* known of an instance in which a "parasitic fungus" plant grew out of the *living matter* of another plant or tree? Or have you not relied on what others, like HENSLOW, have *supposed* and *conjectured?* If the latter, excuse me for disbelieving the correctness of the authorities.

Well, gentlemen, I admit that "man (sometimes) feeds on (filthy?) mushrooms;" but does he eat them raw, as nature made them? or does he not, like my smut bug, first prepare them for his use? But because "man feeds on mushrooms, and many insects devour parasitic plants, without being suspected of producing them," is it any, the least possible proof, that no insect prepares a nest for its young, and food for itself and offspring, by producing a change in the structure or organization of part of a plant, or tree? Do not the "oak-gall" insect, the "black-knot" insect (of the plum tree,) the honey bee, and many others, "too numerous to mention," by their "operations" produce changes in natural productions, to suit them to their uses and purposes? Indeed, I think you concede the point in admitting that "the instances are numerous where insects produce remarkable changes," &c. I ask, for what purpose do they do these things? For the mere pleasure of doing something remarkable? Or is it not more "philosophical" to suppose that they do these things to fit those natural productions for their uses as nests for their young, and food for their offspring and themselves? What inference do you draw from the facts admitted by you? If the same with myself, as I must suppose you do, why not permit my smut bug, which not only feeds on smut, but makes use of it as a nest and food for its offspring, to come in with those which you admit as "producing remarkable changes," &c.? If, however, my theory is unphilosophical, it appears to me to be infinitely less absurd than that which teaches that "a single smut ball contains some four millions of sporules, [seeds,] each one of which will doubtless grow and produce other millions, under favorable circumstances"!—Why, gentlemen, have you considered the fearful consequences of such a state of things—truly "important, if true"? At this frightful rate of production, it appears to me that this terrific "parasitical fungus" would, in a very few years, smut all the wheat in creation; and totally deprive us of the largest and best portion of our natural bread food!—nay, it must long ago, inevitably, have produced that destructive result; not only in regard to wheat, but as to all the other grains which we use in making bread: for, as I understand the theory, each and every kind of those grains is liable to its attacks, in some form or other. No, no, gentlemen; there is quite too much of the marvelous about this fanciful scheme of nature's mysterious workings in extremely small things; and I can not but be surprised that any sensible, reflecting, practical man, should long believe in the truth of such fantastical freaks of the imagination; unless, indeed, like him who gave as a reason why he believed the story of Robinson Crusoe's adventures to be a true relation of facts, he supposes that "if it had not been *true*, it would not have been printed"!

To your correspondent JACOB LOOR, I will take the liberty of saying that I have been engaged in raising wheat as a staple crop nearly fifty years, and have tried many experiments with my seed wheat, by steeping and liming it; sowing very badly shrunk seed, (little heavier than chess;) and also as good, ripe, large, plump, and beautiful wheat as I think man ever saw: and yet the produce of the latter, as well as of the former, was smutty. I believe that if a grain of wheat has vitality sufficient to enable it to grow, it is probable that it will produce good wheat, though perhaps not as much in quantity as the largest, best, and ripest grain. My shrunk wheat grew; and I did not discover that there was any matertal difference in the product of that and the large, plump, and ripe seed. I have never used seed wheat that was not fully, or dead ripe; believing it to be more certain to grow than that which is unripe. J. H. H.

ELDER

IT is generally admitted, that leaves are to plants what lungs are to animals. I believe also they serve the purpose of organs of digestion. The analogy then, between plants and animals, would lead us to this conclusion, viz: that whatever mode of treatment would be fatal to one, would be fatal also to the other, and vice versa. As the vital energies of an animal are more active than those of a plant, the effect would be more immediate but not more certain. To destroy an animal it is only necessary to destroy the organs of respiration, or to prevent their action; to destroy a plant, do the same, and let the operation be continued inasmuch as the effect is more slow.

The following would be my method of killing "lders:" I would allow them to grow till about midsummer, but not later than till after flowering, or till the berries are partially grown. I consider the root to be at this time in its most enfeebled state, as the plant is now nearly done growing. Now let the bushes be mowed close to the ground; let them dry, and burn them on the spot where they grew. If any new shoots make their appearance, pull them up or cut them off. If any appear on the following spring, repeat the process, but remove them earlier, otherwise the root will acquire strength. I have little experience with elder, but I have some with other plants, and I know that there are few plants to which this treatment would not be fatal, if followed up. I am now experimenting on three of the most difficult subjects of the vegetable kingdom, and have little doubt of success. For a time the destruction of one shoot seemed only to prepare the way for a score of others; but they begin to hold up a little, and I expect soon to see them come up *weak and sickly*, as the root appears to be exhausting itself. If I succeed, I will give you the result. H.—*Down East, July*, 1850.

BEES.—No. 3.

HIVES, &c.—I have concluded to take up the *practical* part of my subject without further delay, as this part is of the most importance to the majority of bee-keepers; and if my remarks on this branch of bee-culture are not from necessity considerably extended, I shall resume my essays on the most interesting portions of the natural history of this insect, in a brief manner.

There is no greater error into which bee-keepers generally have fallen, than that of erroneous sized hives. Look where you will, you will in most cases find hives from the size of a box ten inches by twelve to three or four times that size. Again, the *shape* of hives is a matter of great importance. Long, narrow hives, never produce as much box, or surplus honey in the supers, or chambers, as those of a more shallow form; for the reason, that in long hives the bees meet with more obstructions in ascending, and they are often discouraged by the difficulties of forcing their way through some two feet of solid masses of bees, and refuse to work in the chambers at all. On the contrary, hives of about twelve inches in height, with a suitable breadth, give greater facilities for ascending; and more honey is generally stored in the chambers of such hives, than in longer ones. Hives without a *super*, (an upper section to receive surplus honey, free from bee-bread and brood, which being removed produces an annual profit without the loss of the bees,) I consider not worth discussing, and straw hives the worst of all. Bees will do very well frequently in such hives; but if one wishes to obtain a profit and save the lives of his bees, he must discard straw hives and those with no chambers. These hives are as much behind the age as the *wooden* plows of Mexico are behind our most improved patent ones now in ure.

After we obtain hives of the right *size* and *shape*, the communication to the chamber is also most grossly mismanaged. Some people make a *single* hole in the center, about *one* inch in diameter! This is the extreme of folly. What man in his right mind, if he had several thousand men employed on a work extending one hundred rods, would cause them to pass through a single passage in the enclosure, with burdens from without, and then disperse to their respective locations of duty? Would he not open numerous ways of access along the whole front, that no hindrance may occur one to another in the pressure of the passage? Most certainly he would.—Now bees are laborers in miniature, and in their labors require the aid of philosophy and reason to facilitate their operations. Instead of *one* hole, a half a dozen or more should always be made, of at least an inch and a quarter in diameter, or a single large round or square aperture, several inches in width, should be made. I recommend *nine* (inch and a quarter) holes, three in a row.

It may be said, without any fear of being in error, that a hive, the *lower* section of which shall contain more than two thousand cubic inches *in the clear*, is too large; and one with less than fifteen hundred, too small. About eighteen hundred cubic inches I consider should be the solid contents of hives; that is, the lower section, designed as the permanent abode of the bees. I have made them twelve inches square, and I have made them thirteen inches in diameter by eleven inches in height—*inside*, recollect; and for a northern latitude above the city of New York, the latter size is preferable. If you add an inch to these latter dimensions, you might not readily perceive the difference in your success; but in the long run there would be a considerable difference. The object of keeping bees generally, I take for granted, is for *profit*; and the hive that produces the most *swarms* and the most *surplus honey* in the supers, taking a series of years together, is the best without doubt. A hive of large dimensions will not throw off as many swarms as a smaller one, nor will there be as much honey stored in the super. This is a *settled* point; hence we must discard such hives. The queen requires a certain area to deposit her eggs in, and a hive of eighteen hundred solid inches is as near her requirements as can be set down as a general rule, always allowing for the few thick combs that may in some cases be used simply as *store combs*. These store combs, however, are not always constructed; and it would be better if we could adopt some plan to cause the bees to adhere wholly to the supers, as a depository of such combs: but we can not do this in all cases. If the hives be too small, the queen is limited in her labors—there is not so great an increase—not so many swarms—and not so much honey stored.

It is natural for an inexperienced bee-keeper to suppose that a large swarm requires a large hive, and a small one a small hive. This is erroneous. If we merely look to the first season only, it is partially correct; but we should take subsequent seasons into our calculation: and if we do this, we shall never vary the size of our hives, let our swarms be what they may. Even a double swarm, if I could not easily divide them, I should put into a usual sized hive; and if the bees found difficulty in laboring there, I would place a *nadir* under them; that is, a temporary box open at both ends. In the fall, the nadir may be removed by severing the combs with a fine wire drawn through them, when all the bees will be able to enter the hive proper. Supers may be as high as you please, and not interfere with any principle detrimental to the prosperity of the bees; but they should not contain more than one-half or two-thirds the number of cubic inches that the lower section does. If they do, the extra space will be useless. If your hives be from twelve to fifteen inches in diameter, nine or ten inches in height is enough, and of the same diameter as the lower section. Most chamber hives are made in one box the full length, the chamber being formed by a division at the proper distance from the top. One side of the chamber being open, it is closed by a door hung on small butts, with a hook or button to secure it when shut. One or two boxes are then placed in the chamber, with a pane of glass in front, or a small piece of glass only, say enough to cover a hole two inches in diameter, for the purpose of seeing when the boxes are filled. This kind of hive, if made of the proper dimensions, does very well; but they are not as convenient as those made in two distinct sections. The various styles and kinds of hives in use are numerous, and I shall endeavor to give the most of them as extended a notice as my limits will allow.

T. B. MINER,
Author of the American Bee-Keeper's Manual.

Clinton, Oneida Co., N. Y., 1850.

A FARMER should never be so immersed in political matters, as to forget to sow his wheat, dig his potatoes, and bank up his cellar.

DESTRUCTION OF INSECTS.—MOLES

MESSRS. EDITORS:—One of the greatest misfortunes to which mankind are subject, is the aversion to study and observation—an unwillingness to abandon old notions, and to learn from the experience of others. We cleave to our prejudices even when our judgment is convinced that we are wrong. It is true, a spirit of inquiry is awakened in some quarters, which augurs a better state of things; but it is equally true that the spirit of prejudice is dominant throughout the land, and is likely to continue, since those who most need light are least willing to receive it.

I have been led to these reflections from reading, in the Rural New-Yorker, an article on the subject of "Birds, Insects, &c.," (to which I propose to reply as soon as I shall have learned the fate of this,) and in the last number of the Farmer a few lines on the subject of "Destructive Insects." The *mole* I have always considered an inoffensive animal. I know he is sometimes accused of doing mischief, but I have no positive evidence of it, although I have been acquainted with him more or less, even from my boyhood. My father never encouraged the killing of the little *black coats*, although they sometimes "plowed his meadows;" for he observed that the meadows did not appear to be injured by the operation, but rather benefited.

I have read two short articles on the habits of the mole. The one was in an English publication, and is now mislaid. I will, however, give you the substance of it as I now recollect it. The writer remarks, that having a small piece of ground very much infested by moles, he was induced to investigate their habits. In the course of the investigation, while digging up the ground, he discovered their store-house. It consisted of a smooth cavity in the earth, filled mostly with *cut-worms* which had been stunned, but not killed, by being slightly wounded in the back of the neck. Whether this was their winter's store, or a supply for their young family, I do not now recollect. I only remember the fact.

The other article is also from an English writer, and being rather longer than I wish, I will abridge it, retaining the author's statements and, as far as possible, his language. "Some ten years ago," says the writer, "when I commenced cultivating the little land I now hold, it was full of wire-worms. My crops were greatly injured by them, and in some places entirely ruined. To remedy the evil, I encouraged *moles* and partridges on my land. Instead of killing the moles, I bought all I could and turned them out in my fields, which were soon, one after another, full of mole-hills, to the great amusement of my neighbors. My fields became like a honeycomb, even among my standing and ripening crops. The worms in my grounds are now all destroyed, and the moles, having nothing to eat, are obliged to emigrate to other lands, and thus get bowstringed by savage men whom they come to serve. The wire-worm is the chief food of the mole. If you doubt it, open the stomach of one, and see. It is a vulgar error to suppose that they root up young corn—they do not trouble it till the worm has first attacked it, and then are blamed for the crime of another. All summer partridges live upon insects, wire-worms, &c.; and consider how many millions a covey of them will destroy in a single summer." The inference from such facts is, that in consequence of our prejudices we are often unjust to animals, at our own cost. H.

Answers to Inquiries.

SCIENTIFIC FARMING.

MESSRS. EDITORS:—While perusing an article in your interesting and useful paper, headed, "A few Facts about Plants, Soils, and Animals," an idea occurred to my mind, by which you would confer an incalculable benefit on *one* of your readers, if not on all, by presenting in the columns of your paper, a table showing the *food* necessary to the production of the different grains, grasses, and vegetables, cultivated by farmers generally in this latitude. By food I mean the different elementary bodies used by the Creator in feeding and forming vegetable and animal substances. The time has arrived when it is as much a sin and disgrace for a farmer to grow poor, sickly, spindling crops, as it is to have his animals in such a deplorable condition; and, for one, I want to know what to feed my crops as well as I know how to feed my horses, cows, and sheep. It is but lately that I became a reader of your valuable sheet; but I would not do without the monthly feast that I draw from its pages for ten times its cost. If you consider this request (for I will present it as one) worthy of your attention, you will satisfy the desire of an inquirer after scientific knowledge, by preparing a table as above spoken of. HENRY D. HOBBS.—*Carlton, Orl. Co., N. Y., July*, 1850.

THE varied and profound science of agriculture is not to be communicated, nor learned so readily, as our esteemed correspondent appears to believe quite practicable. If he is familiar with the principles of chemistry in its application to tillage and farm economy, he possesses great advantages for making rapid progress in the useful art of feeding cultivated plants. But if the language of chemistry, geology, vegetable and animal physiology, is to him an unknown tongue, it will be difficult for us to make him understand the science of rural economy by any short-hand tables which can be published. We will, however, do our best to facilitate his study of a noble profession, which embraces the most sublime truths in the mineral, vegetable, and animal kingdoms. These kingdoms, in the providence of God, meet, mingle, and blend harmoniously together, on the surface of our planet, and not elsewhere above or below its surface.

The matter which forms all rocks, soils, mold, plants, animals, air, and water, is ever governed by immutable laws. As our knowledge of these wise and never-changing laws extends, our control over the material elements that surround us, and feed and clothe our bodies, increases in a geometrical ratio.

Has HENRY D. fully considered the fact that the same sunshine, atmosphere, frost, rain, dew, and snow, fall upon an acre of land that yields but six bushels of corn per acre, as fall upon one which produces a crop of sixty bushels? This is a fact of great significance in the science of agriculture. It admonishes the husbandman not to depend too much on the resources of air, water, solar heat, and light; while he should carefully avoid the opposite extreme, in studying the pasture of cultivated plants. The economical improvement of this pasture will be promoted by investigating the origin of a rich vegetable mold, the consumption of which is the first labor of a thoughtless farmer. A good mold is one that abounds in the elements of wheat, oats, peas, and beans. It differs from poor mold in containing more nitrogen, potash, phosphorus, and sulphur, than the latter possesses. The cheap production of a deep, rich soil, on a surface naturally sterile, is the point aimed at by our correspondent, when he talks about "the food of grain, grass, roots," &c. He delights in seeing fat crops and generous harvests, and the growing of such is the true road to agricultural independence.

We have said that a rich mold abounds in nitrogen, which is the base of ammonia, and an important element in both bread and meat. One hundred pounds of dry, lean meat, in the carcass of a dead horse, will yield fifteen pounds of nitrogen, and of course form an exceedingly rich mold. A like weight of wheat will yield two and a half pounds of nitrogen; and therefore, in comparison with the stems, leaves, roots, and solid wood of most plants, will also form a rich mold. One hundred pounds of wheat straw contains but a third of a pound of nitrogen: hence, if it could all be transformed, it would take seven pounds of straw to make one of wheat, and forty-five to form one of horse flesh. But there are worse plants for making rich mold, or the flesh of animals, than wheat straw. Dry water-rotted hemp stalks, and pine saw dust will form poor mold and poorer horse feed.

Clover, peas, and corn, are among the best plants for producing a valuable mass of organic matter in the soil for future use. But suppose one's land is "clover sick;" what then is his remedy? If plaster fails to bring clover, and wood ashes and bones are not to be had, he must try timothy, rye, peas, or buckwheat. With the aid of lime he may probably grow grass and make manure, which will give him corn and other grain. Deep and thorough tillage increases the available food of plants, more than any other one thing of equal expense. The sub-soil is full of genuine manure, if you only make it as fine as the earth in an onion-bed. Deep plowing and liming have cured many a clover sick field in England; and they will do as much in this country. Making meat and saving manure have done much to renovate poor lands. We know several large farmers who grow peas and oats to be eaten by hogs in the field just before they are fairly ripe. All the straw and manure being left on the ground, it is enriched and prepared for wheat, corn or clover. Many injure their farms by making haste to become rich — running their fields closer than their stock of fertilizers will warrant. Such men should read more and labor less. A person is seldom worse employed than when impoverishing the earth.

DRAINING.—PROFITS OF POULTRY, &c.

Eds. Gen. Farmer:—I became a subscriber to your valuable paper at the commencement of the present volume, and seeing your manifest willingness to answer questions, I venture to ask a few. I have only a small farm—about thirty acres improved, or rather worn out. It lies across a ridge, the southern extremity reaching into a deep swamp. The soil is gravelly. The water from this swamp reservoir, which has a very imperfect outlet, leeches its way through this ridge, and bubbles up clear and cold through all the land below the ridge. You know the effect of this.

I can content myself no longer to go upon the old principle—do as father did,—but intend to make my few acres produce as much as the same amount of labor I perform can draw from double the number of acres; and by so doing recommend your paper to my neighbors. But to the question—whether to ditch this land below the ridge, by cutting a ditch below and parallel to it, and thence convey it away through covered channels; or cut through the ridge, and drain the swamp. In order to do the latter, the ditch would require to be only about six feet deep for a distance of about fifty rods, to bring it where the ditch would be run across by the former plan; the remainder of the distance would require a depth sufficient to make the land dry below the reach of roots. To me the draining of the swamp would be of little advantage, as I have but two or three acres of the land, and that I do not wish to clear: neither does the swamp make it sickly, as might be expected.

Another question, with regard to keeping hens. I am tired of having hens run at large; they scratch up the seeds I sow, unless I cover them with brush; and they eat up my strawberries, to say nothing of the damage done to field crops. I want a supply of eggs for a large family. Now, the question is, whether I can afford to build a suitable place for them, barely to supply my own family, better than to pay 8 to 12½ cents per dozen for eggs. If so, will a space 12 by 70 feet, on the west side of barn and sheds, with the upper part of sheds for roosts and nests, be sufficient room for fifteen or twenty? And is there any way to keep them from eating their eggs but by being too spry for them?

If you will have patience to read and answer these inquiries, you will oblige a subscriber; if not, I shall not be disheartened, but experiment for myself.

I will say a few words here, about what I have done and intend to do on my farm. The first step I took in the way of reform, was to build good, substantial fences. Compared with the generality of farms, mine is well fenced—corners staked. This relieves me entirely from anxiety about intruders. I have nearly cleared my fields, and now I am ready to lay my ditches straight, and my furrows straight, and double their former depth. This last is necessary through all this section.

I anticipate being able to send you a respectable list of names for your next volume, and prove myself yours, truly. George T. Cook.—*Madison, Ohio, July, 1850.*

We should think it very advisable to drain the swamp, as you last propose; and as you own but a part of it, perhaps you could get your neighbor or neighbors whose land would be benefitted, by it, to assist in the work. Individuals whose farms adjoin, might often engage together in the work of draining, to their mutual advantage. But we doubt whether this would entirely remedy the evil you complain of, and we would advise you, by all means, to drain directly that part of your land where the water "bubbles up clear and cold." This should be done by covered drains. Various plans of forming covered drains we have given in previous volumes of the Farmer; but if Mr. C., or any of our readers need more information than they now possess, on the various modes of forming under-drains, we will give it with pleasure.

We don't wonder that our correspondent is tired of having his hens run at large, scratching up his seeds and eating his strawberries. We got tired of it a long time ago. There is no doubt but every farmer can afford to build a suitable house and yard for his chickens. (We gave a very good plan for a cheap house, in the April number.) To be sure, if he should charge the hens every quart of grain they eat, and credit them with the eggs at about eight cents a dozen, the account might not show much of a balance in their favor; but then there is a satisfaction in having every thing around you, needed for family use. You are always sure of having your eggs fresh, and never have the unpleasant query arise in your mind, as you break an egg at the breakfast table, whether you are to have an egg or a chicken for breakfast. On a farm, too, there is always refuse grain, not marketable, that will keep the chickens needed to furnish eggs for a family. There is another consideration, too, of importance, and we fear generally forgotten; and that is, the value of the manure. It is the most valuable manure—almost equal to guano. We always think the manure pays us for the grain consumed, to be used in our flower and vegetable garden; and we get the eggs for the trouble of taking care of the fowls. Tnis is the way we reckon the profit and loss.

The yard you speak of will be large enough; but if you could build it on the east or south end of your sheds, it would be less exposed to storms. If you are "*spry*" enough to keep your hens from eating their eggs, you will have to be "*spry*" indeed.—

Hens often eat their eggs before they leave the nest. We were much troubled with this in the spring, and tried various remedies. We took what we supposed to be the guilty ones and shut them up by themselves; but those left went on eating eggs, as before. We then extracted the inside from several eggs, and filled the shells with Cayenne pepper, and placed them in the nests and on the hen-house floor; but they eat the shells with evident satisfaction, and only laughed at us for our pains. We then procured several *china* eggs; and the hens, after pecking at them till they were satisfied, gave up egg-eating as an unprofitable business. Since that time we have kept these china eggs as nest eggs, and we have no reason to believe that we have had one eaten since. These china eggs can be procured at most of the Agricultural Warehouses; but any one could form them well enough out of any hard substance. We have made them of chalk; and another mode is to fill an egg shell with plaster of paris, which soon becomes hard. The plaster must be mixed with water, and be about the consistence of cream when poured into the shell. We think it a bad plan to give fowls egg shells, unless they are broken very fine, and even then we would rather supply them with lime in some other form.

GUANO AND LIME.

MESSRS. EDITORS:—With your permission I should like to propose a few queries for solution. Is it profitable for farmers in this vicinity to pay from forty to fifty dollars per ton for guano, to be used in preparing land to seed with wheat? What quantity ought to be put upon an acre? And what is the best mode of applying it? I have a piece of ground that is well seeded to June and blue grass, and some clover, but not enough to do any harm, upon which I design to sow lime. Had I better sow lime before plowing, or afterwards? Or would it be better to sow some before plowing, to assist in the fermentation of the sod; and some after it has been plowed and cultivated so as to mellow it and prepare it for seed? Please answer these inquiries, as soon as convenient, in the Genesee Farmer, and you will much oblige A SUBSCRIBER AND CONSTANT READER.—*Orleans Co., N. Y.*, 1850.

If one was sure of getting a first rate article of Peruvian guano at $40 or $50 a ton, it will doubtless pay to apply 250 lbs. per acre in Western New York in growing wheat. Its whole strength is not exhausted in one year, but the second crop will be considerably benefitted by this powerful fertilizer. Large quantities are used in Delaware, New Jersey, Maryland, and Eastern Virginia; and generally with satisfactory results. Some cover it with the plow, others with the harrow or drill. It matters little what implement buries it in a mellow soil; but it should be covered a few inches to prevent the loss of ammonia by solar influence. In England it is found best to apply one half of the guano at or near the time of seeding, and the other half in the spring. In the latter case the manure is covered with a hand or horse-hoe, harrow, or cultivator. In regard to the application of lime, if only a small dose is to be used, spread it all on the grass before plowing. If forty or fifty bushels per acre are to be applied, put a moiety on the grass, and the other half on the inverted sod, which should be well harrowed soon after the lime is spread. The object is to incorporate it well with the soil.

MESSRS. EDITORS:—Is there any remedy for pork after the brine has begun to sour, except boiling the brine. H.—*Down East, July*, 1850.

There is none which is safe.

REVIEW OF THE TRANSACTIONS OF THE NEW YORK STATE AGRICULTURAL SOCIETY.—No. I.

We have been favored with a copy of the Transactions of the State Agricultural Society. It is a large volume of 944 pages, got up with great care by the Society's efficient Secretary, B. P. JOHNSON. The printing of the volume hardly does justice to the matter, and compares unfavorably with the Transactions of some County Societies now before us. It is, however, as well, perhaps better, done than public printing generally. We have long thought the annual volume of Transactions not only very creditable to the Society, the State and the Nation, but superior to any similar European publication. This opinion is corroborated by Prof. JOHNSTON, who, in his address at the last State Fair said, "I have been both interested and instructed by the volumes of the Transactions of your Society, and I have heard them in a public meeting in Scotland most highly spoken of, and favorably contrasted with the published proceedings even of the Highland and Agricultural Society of Scotland." The present volume we consider superior to any of its predecessors; and as but a very few of the many thousands that read the Farmer will ever see this volume, we shall endeavor, in the review we intend to make of the book, to give some knowledge of its contents.

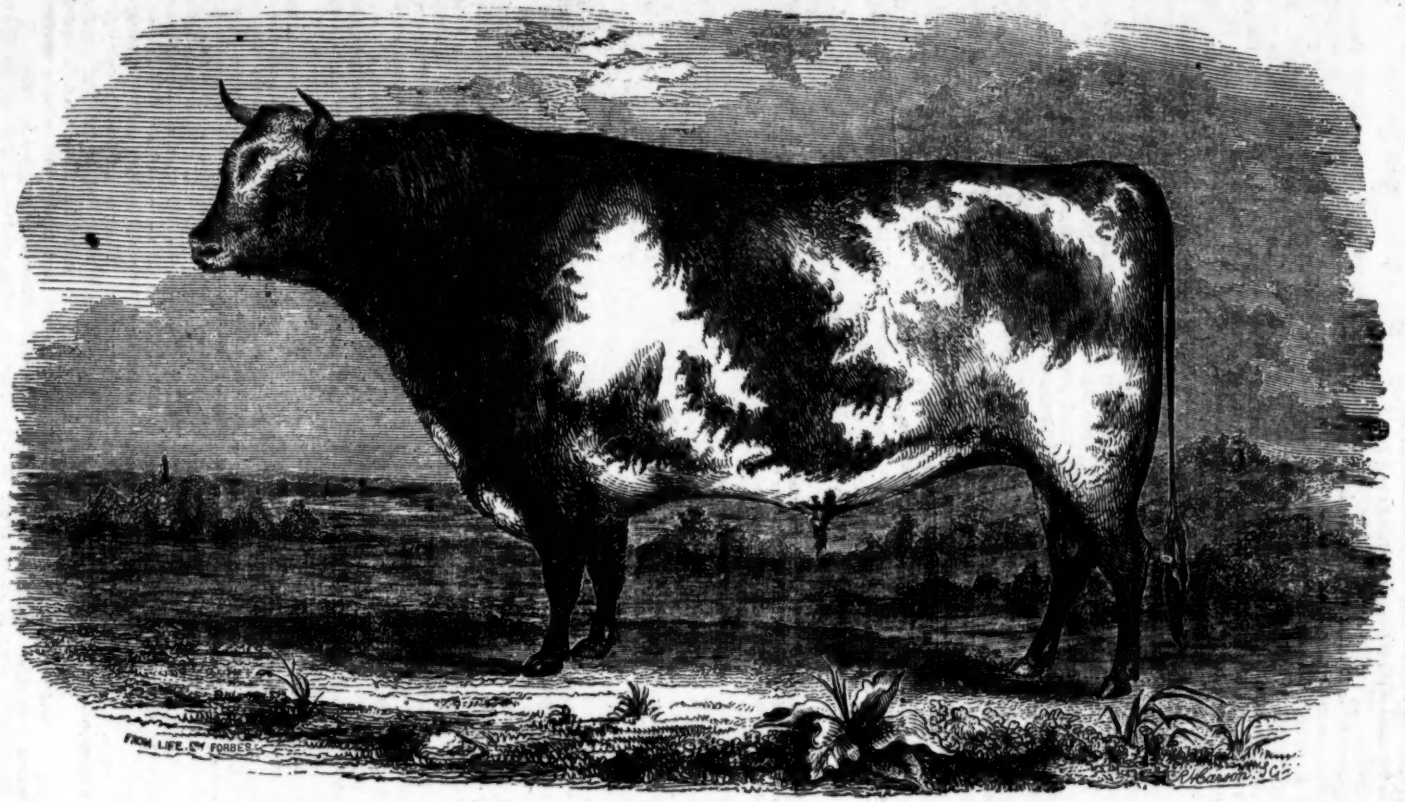
The work commences with the Report of the Executive Committee for 1849. The Committee express their gratification, not only at the successful operations of the State Society, but also of the County Societies in all parts of the State, showing "an increased attention on the part of farmers to the improvement of their farms, and much more regard to economy in their management than heretofore; and also, an adaptation of their crops to the soil so as to secure the best returns which the land is capable of yielding." Although the committee announced the same improvement, in their report last year, and almost in the same words; yet, it is not a stereotyped unmeaning array of words, nor an opinion expressed by them for effect, but it is the words of truth and soberness, as all must be aware who have paid any attention to the present and past condition of agriculture in the State of New York. Houses and lands, sheep and oxen, give evidence of the fact—its truth is proclaimed by abundant crops and well filled barns. The work is progressing. The light of science is scattering the darkness of ignorance—common sense is gaining the mastery over prejudice.

In speaking of the PROFITS OF FARMING, and its ADVANTAGES, the committee make the following truthful remarks:

> Though it may not lead to sudden and enormous wealth, (and it is far from desirable that it should,) still is a remunerative business, and gives, in a pecuniary point of view, a liberal return for capital judiciously invested. That it is an employment best calculated for real enjoyment, best designed for permanent prosperity and security, as well as for the cultivation and enjoyment of all those moral and social qualities that give zest to this world's intercourse, is so apparent, that no argument is necessary to establish it.

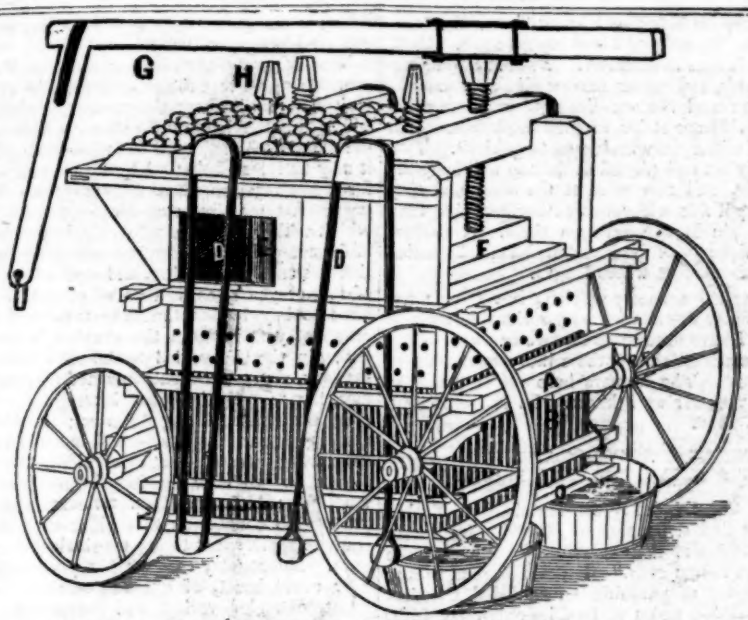
If farming brings not sudden wealth, it brings not sudden poverty. There is not perhaps one year in a life-time in which the intelligent and industrious farmer can not make his farm produce enough to supply himself and family with all the necessaries of life, and all the luxuries good for man.

The engraving of Devon Bull on the following page is copied from the Transactions. We shall resume the subject in next number.



AYRSHIRE BULL, DANDY.

THE PROPERTY OF R. P. PRENTICE, MOUNT HOPE, NEAR ALBANY. WINNER OF THE FIRST PRIZE FOR AGED BULLS, IN AYRSHIRE CLASS, AT LAST STATE FAIR.



CHAPIN'S PORTABLE CIDER-MILL AND PRESS.

CHAPIN'S PORTABLE CIDER-MILL AND PRESS.

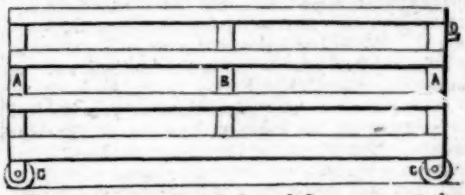
This machine was patented in 1848, but since that time some alterations have been made in the grinding apparatus, with a view of rendering it as perfect as possible. It may be drawn from one orchard to another, and with a man and stout boy will make fifteen barrels of cider a day. The apples are handled but once, the pumice falling into the press crib B, thus forming the cheese, while the apples are being ground. By the action of the screws the cider is forced through the openings in the sides of the crib, and conducted to the tubs by a channel in the margin of the platform, O. When the pressing is finished, the tubs and rear grate B are removed, the platform O is let to the ground, the cheese is drawn out in a body, upon a seperate side platform, under the rear axletree A, and left clear from the mill The sweep G, after turning the screws, is placed upon the center shaft of the grinding machinery H, and the process again commences.

A correspondent in Onondaga Co. writes: "This machine is really an excellent thing of the kind — I truly believe the very best. A man and boy with a horse can easily earn $5 per day (making 15 bbls. at 37½ cents each — $5.62,) for two months."

It is manufactured by N. Chapin, of Syracuse, N. Y. Price for single mills, with a town right, $100.

BARNS AND FARM-GATES.

Messrs. Editors:—I have long been in favor of a large, deep bay to a barn, preferring to *pitch up* more in winter and less in summer, and then it seems as though that side of the barn held about twice as much for it. For a few years I have used one eight feet deep, with logs and pieces of rails, &c., in the bottom, so as to allow the cats room to carry on their useful avocations under it; and my love for the thing does not yet cool by familiarity. The barn is built on ground descending one foot in twelve or fifteen, which answers my purpose better than I supposed so gradual a descent would. The end opposite the bay is raised three feet or more, and has a stable in it. It is dug out under the stable and threshing floor, which is now used for a shed. I have seen such a place used for a stable, the fodder being put into the rack under the bay girt; and when the hay was low, direct from the bay to the rack — a little of the bay being appropriated for the rack and the cattles' heads. But what I value above a good bay, is a good place to put the manure; and I have finally got such a place, under the stable. The stable is so wide, but little dung gets on the the back plank, and with something like a handle to a door-latch and a lever, I turn up the plank and put down the manure about twice as fast as you could throw it out of the windows. It catches much of the urine, and wastes but little to what it would out-doors. The plank next to the back one should be pinned fast, and leave a crack an inch or an inch and a half in width. There is a wall under the outer edges of the stable, and a drain under that, one foot deep, so as to keep it dry under the barn; and a pair of doors back, where I draw out the dung. The yard is not much larger than is really necessary, inclosed by a tight fence six feet high; and when I dug under the barn, I made those parts of the yard that were too level somewhat undulating, and it is pretty dry for such muddy ground.



The above engraving is intended to represent the

best substitute for bars that I know of. A, A, scantling, 3 by 4. B, strip of board nailed tight. C, C, wheels, six inches in diameter. To be made mainly of fence boards, and run on narrow plank six or eight inches wide; and the one the gate runs on when opened, should have strips an inch thick fastened on each side of where the wheels run, to guide it. Two stakes firmly set and pinned at the top will keep the gate upright, and two more at the other end may serve to keep it firm without any other fastening than having the pin D ran between them. A narrow strip, the thickness of the board D, should be nailed on the upper board its whole length.

This is called a snowy region; but I have not known the snow to offer any very serious obstacle to this gate. I have used three for two or three years, and have sometimes shoved them into a snow drift to get them open. The farmers here prefer this gate to any other, as far as I know. N. N. — *Oswego Co., N. Y.*, 1850.

S. W.'S NOTES FOR THE MONTH.

SUCKERING CORN.—The last Rural New Yorker says: "We find some persons still adhering to the exploded doctrine of the necessity of pulling off the suckers from Indian corn." I would as soon accuse that pomologist of pursuing an exploded practice, who takes from a tree a part of its redundant fruit, that the remainder may improve in size and quality. I have found from repeated experiments, that corn deprived of its suckers will be some ten days earlier than the unsuckered corn, and the main ears will be larger and better filled. 'Tis true that the suckers bear a "beggarly account" of nubbins, which may help out the bulk of ears; but methinks the suckered stalks will yield enough more in weight of sound shelled corn to make up for the nubbins. I am yet to be convinced that the pollen from the suckers is of other use than to fructify the ears produced by the suckers themselves. So far as fodder is taken into the account, the advantage is undoubtedly with the unsuckered corn: hence I take it, that farmers with large fields and little help will find it to their account to let suckers mature; while he who grows corn for the early green ears, will never fail to cut off the suckers, and remove every barren stalk from his corn patch. Before July had passed away, I had plenty of plump ears of eight rowed, large kernel, white corn, more than six inches in length. This variety has been improved by cultivation from a very short ear to one of fair length; the stalk also increases in size and height; but it also matures later, maugre the precaution of saving the earliest ears for seed.

FREE TRADE IN BREAD.—In the death of Sir ROB'T PEEL the yet struggling friends of commercial freedom in Great Britain have lost an able advocate. Let every American farmer bless his memory, since it was under his ministry, and mainly owing to his unanswerable arguments, that the most odious restrictions on our agricultural productions were removed. While in England every loaf of bread made of imported flour paid a tax to the landlord and the farmer, in these United States the farmer is almost the only great producer who has never yet clamored for a bounty on his industry, by a tax on the other classes. Hence it is that the farmers of these United States are the most self-relying of men. God grant that they may never know the effect of that luxury which is compassed only by selling dear bread to the poor and hungry million!

THE WHEAT CROP AND THE COMING PRICE.—All accounts agree that the present yield of wheat in the United States is above the average of former years; add to this the increased culture of this cereal, and the quantity for sale will be unprecedented. Hence it may be inferred that without an increased demand for export, prices must rule very low the coming year. Let me then enumerate some of the causes which will keep up the price of wheat to an average of former years. In the first place, foreign emigration is steadily increasing, and most of the emigrants of former years, as well as all of the present, will have to buy bread; then the failure of the wheat crop last year in Ohio, the greatest wheat growing State in the Union, led to the exhaustion of every granary, many of which contained the wheat of former crops; then the great increase of villages and cities throughout young America; the great and increasing demand for bread-stuffs induced by our manufacturing industry—not as of old, in New England alone; but all over the length and breadth of our land, from Maine to New Orleans, and the great west. No country on this globe ever had a home trade so rapidly, not to say magically, increasing, as ours. No country so young in years can boast, or ever could boast, of a manufacturing industry so great, extended, varied, and increasing as ours.—Even those cotton lords in New England, who of late have closed some of their mills, confess that the competition from within has become more formidable than it ever was from without. Then the great increase in public works of every kind and fashion—the multiplicity of rail-roads and plank-roads, which employ so many in the construction, and so many in tending and repairing. And then there is the extra trade induced by these facilities.

THE SEASON AND THE CROPS.—The wheat harvest is now over; the crop is large, and it has been generally well secured in spite of the hot weather.—Such a growth of grass, oats, barley, Indian corn, &c., few other seasons ever produced. Those who aver that vegetation within the tropics during the rainy season far surpasses ours, had not observed the rank growth of this season in Western New York. Go into a well tended garden, and see how the vegetables jostle each other; no line of demarkation is observable just now (12th of August) between the beds. Every thing vegetable has not only exceeded its wonted altitude, but both bush and vine have gone entirely over every prescribed limit assigned to them by the best practical experience.—Although we have had much and frequent rains, the present has been everything but a cold, wet summer. All our wet summers before this have been invariably accompanied by cool, cloudy weather. We have had no cool weather this season since the 3d of June.

STATE AGRICULTURAL FAIRS.—It behooves the Executive Committees of our Empire State Fair to look well to its interests this year, as the Cincinnati papers promise that the coming Ohio State Fair *shall not be eclipsed*. There is a rife spirit of rural progress in great wheat-growing Ohio, if we may judge from the number and ability of the farmer correspondents of BATEHAM'S Ohio Cultivator. If they do invoke the aid of their State Legislature, they put their own shoulders to the wheel nevertheless, as if determined not to be behind their earlier endowed sister, the Empire State.—*Waterloo, Aug.*, 1850.

Horticultural Department.

EDITED BY P. BARRY.

SELECTION OF VARIETIES OF FRUITS.

THERE are yet in the country a very large number of persons in total ignorance of the quality of the different varieties of fruit, who, if they had made up their minds to plant one hundred apple trees, would not be able to select by name half a dozen really good sorts. The leading idea with such people, when they do think of planting, is, to get *large* trees; and large trees they must have. This class of people are not in the habit of reading this or any any other journal of the sort, and therefore any advice we might offer them on this subject would be lost.

Then there is another class, who, by reading on the subject, have learned to appreciate the importance of having good varieties—the *best varieties*—nothing short of that; and when they sit down to make their selections, they are too apt to forget all considerations but *quality:* and this is an error—a great error; but still not half so bad as the first mentioned. There is but one class of persons in this country, and that decidedly the least numerous, who can allow the single matter of quality to govern them in making selections of fruits; and that is the WEALTHY, who can afford to make extensive plantations for their own consumption. Nothing in the world is easier than for such people to make their choice of sorts. They are not restricted by limited means, or limited grounds. They are at liberty to select those of *every season* and of *every desirable quality*, however inconsiderable it may be.

But not so with those who plant orchards for the supply of the market. No matter how good a variety may be, if it cost as much to raise the fruit as it can be sold for, or if its peculiar texture or short duration render it impossible to carry it to market, of course it would be unwise to plant it. The orchardist wants hardy, vigorous trees, good bearers, and as far as possible, large and showy fruit that, whether early or late, keep well and bear transportation. Hence, for instance, in planting a cherry orchard for marketing, instead of planting the *Belle de Choisy*, which is one of the most delicate and finest flavored varieties, but a small tree and shy bearer; or *Downer's Late Red*, *Amber*, or *Honey*, most delicious sweet cherries, but too tender fleshed to bear carriage: such varieties as *Black Tartarian* and *Napoleon Bigarreau*, though quite inferior in flavor, are preferred; because they are large, showy, productive, firm fleshed, and popular in market. So in the case of strawberries—*Swainstone Seedling* and *British Queen* are the two varieties we should choose first of all, if we had extensive grounds and were growing for our own use. The one is the most magnificent strawberry in the world, and the other large and of the highest flavor. But no man who knows the bearing qualities of these two fruits, would think of cultivating them for market; for neither of them will produce enough to pay for their raising and picking. So again in pears—the *Rostiezer*, *Tyson*, *Seckel*, *Gansel's Bergamot*, and *Winter Nelis*, five of the very finest flavored of all pears, will never be, in this country, profitable market fruits, compared with the *Bartlett*, *Swan's Orange*, *Beurre Diel*, *Duchess d'Angouleme*, and *Vicar of Winkfield*, all inferior in flavor to the first mentioned, but large, showy, productive, of good quality withal, and the trees strong, rapid growers, and early bearers. The *Moorpark* and *Peach* are the best apricots cultivated, not only in size and beauty, but in flavor; yet among several apricot orchards that we know of, having been recently planted for the supply of the market, small inferior sorts, such as the *Breda* and *Early Golden*, have been preferred, simply because they are more certain and abundant bearers. The *Crawford's Early* peach, from its large and showy appearance, has become one of the most popular market varieties. Among the mass of purchasers, in any of our markets, it would command a greater price than the finest and most delicate white flesh variety, every way superior to it. So in plums—the *Green Gage* stands without an equal in flavor; but a single tree of *Bolmar's Washington*, *Smith's Orleans*, or *Imperial Gage*, would yield, if the fruit be carried to market, more than four of the *Green Gage*. The former are all vigorous, rapid growing trees, with large, showy fruit of fair quality, produced in abundance; while the latter is a very slow growing tree, with small fruit of the most delicious flavor.

In the neighborhood of such markets as Covent Garden, in London, (where a *Newtown Pippin* would sell for one shilling, and a *Baldwin*, much larger and finer in appearance, only for three or four cents,) *Green Gage* plums, *Seckel* and *Gansel's Bergamot* pears, *Swainstone Seedling* and *British Queen* strawberries, might be grown to advantage; for there the best articles sell for their value, whatever it may be. If one variety be, from the difficulty of raising it, and its superior flavor besides, worth even three or five times as much as another, it will surely obtain it. Not so in most of our markets. Here, for instance, any one of the men and boys who sell cherries might stand a whole day with *Belle de Choisy* without selling a single measure, while in the same time he would probably sell a bushel of *Black Tartarian*. Now a quart of *Belle de Choisy*, from its high flavor and delicacy of texture, and from the comparative small size and produce of the tree, is worth three times as much as *Black Tartarian*.

We remember hearing a gentleman in one of the Pomological Conventions declaim, indignantly and vehemently, against the practice of growing and selling varieties anything short of *first rate in flavor*, no matter what their other peculiar excellences may be, or however popular in market. He said if public taste was so bad as to create and sustain a demand for second rate flavored fruits "it ought to be corrected," &c., &c. Now this undertaking to correct the public taste would not be a small affair. If the fruit grower is bound to correct the tastes of

his customers, so may every other man engaged in furnishing other necessaries and luxuries of life.—The wine merchant must utterly refuse to sell such trash as port and sherry, telling his customers they must drink only the best champagne and burgundy; the grocer must insist on his patrons using only the best refined loaf sugar; the butcher, the baker, and the confectioner, too, must all wage hostilities against mediocre articles. Thus we should have everybody busy correcting other people's tastes — making fools of themselves, and damaging, very materially, the interests of their pockets.

It seems to us a tolerable good plan for those who grow fruits for market, to select such varieties as promise to yield the greatest profits — to consult the tastes and circumstances of the fruit buying portion of the community as they are, and not as some people might think they ought to be. The *season of ripening*, too, must be well considered by the orchardist who plants for profit. In some localities, early summer varieties find such ready sale and good prices as to be highly profitable, while in others they are comparatively worthless. The value will be the greater the nearer they are to a large town, as early fruits can not be carried a very great distance. Land in the vicinity of New York, for instance, might be much more profitably occupied in producing summer crops that require to be immediately consumed, than such as ripen in the winter, and may be transported thousands of miles. The people of Western New York can send their fall and winter apples and pears to New York, and offer them in market in as good condition as those grown within a dozen miles of that city; but we can not so well send our strawberries, cherries, currants, gooseberries, apricots, early plums, and peaches. The sale of such fruits must always depend on markets comparatively local. Such matters as these are worthy of attention by those who are about planting extensive orchards for marketing.

Those who grow fruit for their own use alone, must be guided by very different considerations from the orchardist. His fruits are to be carried to market — they have to go through the processes of packing, transportation, &c.; while the fruit grown for home use has only to be gathered and placed on the table or in the fruit-room. In one case, a barrel of second rate fruit, of large size and showy appearance, will be more desirable than a bushel of first rate quality; while in the other case it would be just the reverse. In one case, tender, rich, delicate fruits, would be quite unsuitable; while in the other they would be precisely what would be wanted. The selection the most suitable for a profitable orchard would be a very improper one for an amateur, or one cultivating solely for his own use. Many people do not appreciate the differences; and on hearing of a certain orchardist having planted a few select varieties, they at once jump to the conclusion that they are the best, and so must get them.

The different circumstances in which different persons are situated, should have a great influence on their selection of the varieties of fruits. As we remarked in the beginning of this article, the man of wealth, with extensive grounds and facilities of all sorts, may indulge in the culture of whatever is curious or novel, or that may possess any one desirable quality. Then there are those with limited grounds, who care little for the actual value of the fruits they may grow, looking more to the interest and amusement their trees may afford them. In such a case, a great variety will be most wanted. Those who have small gardens, and wish to turn them to the best account in the way of fruits, will merely look to a variety sufficient to fill up the various seasons, taking care to have the best and most profitable of each. The most difficult selection of all to be made, is that for a small garden; and it depends so much on local and personal circumstances, that no definite advice can be given on the subject. One man's taste will run more for one species of fruit than for another. In one place apples, for instance, may be so cheap as to make it no object to occupy a small garden with them; in other places it may be different. In all cases the value of a fruit garden or collection of fruit trees depends greatly on the selection of varieties. The two extremes of having too few and too many varieties, must be equally avoided, and all the qualities that are combined in a good and profitable garden fruit, be taken into careful account.

THE CURRANT.

It would appear almost unnecessary to offer any suggestions on the culture of the currant. It is so exceedingly simple, that everybody is supposed to understand it thoroughly — and we will grant that they do; but how many put their knowledge into actual practice? The appearance of the currants usually sold in our markets, and the appearance of them on the bushes in gardens, generally answers this question satisfactorily.

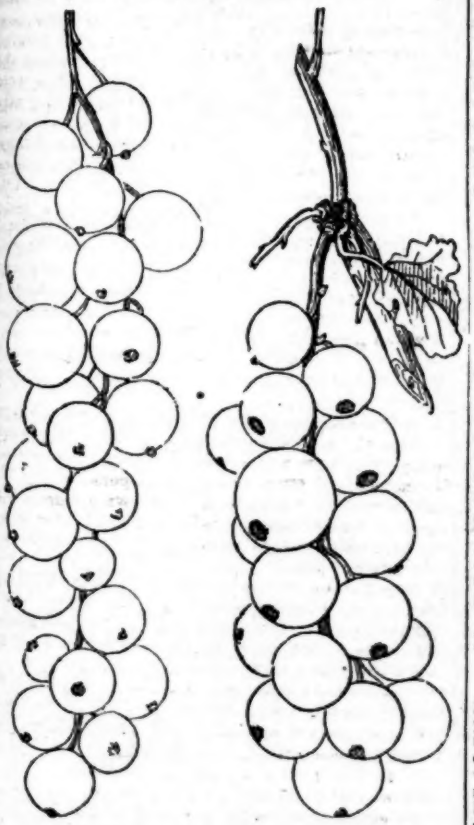
A neighbor of ours, a few years ago, had a dozen or two of currant bushes in his garden, of the Red and White Dutch varieties, and by a proper system of management, his fruit attained an extraordinary size, and were much finer flavored than people generally had ever seen currants before. Indeed, they were to many quite wonderful, and "slips" of them were begged by those who had the very same varieties in their own gardens, in a starved, neglected state.

A few years ago, Col. STODDARD's Alpine strawberries set the whole strawberry-growing community crazy, they were so enormously large and productive. Hundreds, and even thousands, of persons who had the very same varieties in their own gardens, paid the most exhorbitant prices for them. A year or two of experience taught people that *good culture* was the whole secret.

The culture of the currant is simple, beyond a doubt; and so is the culture of Indian corn: but its simplicity is no reason why it should be neglected or badly done. On the contrary, it is a very good and sufficient reason why it should be well done.

The currant bush should have a clean stem of eight inches to a foot from the ground, on which no shoot or sucker should at any time be permitted. Then the head should be kept open, so that the sun and air may have full access to every part. Currant bushes left to themselves have, as will be observed by looking at neglected specimens, the center of the head crowded with small, weak shoots. These produce small, miserable fruit themselves, and injure that upon all other plants. The true way is to keep every branch at a respectable distance from its neighbor, and the center quite open. The main branches should be shortened, too, a few inches at every winter pruning, and this keeps the head of the bush compact, and augments its vigor and productiveness.

Then as to the soil. It is quite useless to expect a currant bush that has stood in the same spot for two, three, or four years, without manure, to produce anything but small, unpalatable productions. A dressing of manure must be given *every season*, either in fall or spring. This and the pruning above mentioned should be as regular as the return of the seasons. The distance between the bushes is worthy of note. Many people plant their currant bushes in a sort of *hedge row*, in some place "unfit for anything else"—perhaps under the shade of some other trees. It is very well to have all the corners of a garden filled up—we like to see it so; but a fruit so useful as the currant, should not be crowded into, dark corners. The plants should have an open border, and not be closer than four feet, unless in very small gardens, where they might be kept in a dwarf form. The fruit at best is acid enough—in the shade it is particularly so. It is only where it enjoys unobstructed the heat and light of the sun, that it attains perfection in size and flavor.



VICTORIA. CHERRY.

In the production of new, improved varieties of currants, very little has yet been done; but the subject seems to attract some attention now. In small fruits, *size* is a most important consideration. A great deal has been effected in the production of large gooseberries, and we know of no reason why the currant may not be equally improved. The fact that new large varieties have been already produced, shows it to be susceptible of improvement. The large Red and White Dutch are as large again, almost, as the old common sorts. Some other recent varieties are still much larger than they. But to those who cultivate badly, all are alike—the worst will prove just as satisfactory in the end as the best.

The following new varieties have fruited with us two years, and we can therefore speak of them from actual experience:

The Cherry Currant.—This is a variety introduced a few years ago from France, very distinct in fruit and foliage from all others, and decidedly the largest of all currants yet known here. The bunches are very short, the number of fruit in each bunch seldom exceeding ten or twelve. Fruit very large—often over an inch in circumference. The outlines annexed were made with great accuracy from an average sized bunch, taken from plants under ordinary nursery culture, quite inferior to that which it would receive in a well managed private garden. It is of a deep red, and ripens about the same time, and are similar in quality to, the Red Dutch. The plant is remarkably vigorous. Shoots stout, short-jointed, and stiff, with large, thick, deep green, slightly folded leaves. Cole says: "It is a poor bearer, not worth cultivating." We apprehend he has passed a hasty verdict. We call it a good bearer—an abundant bearer. The bunches are not so long, nor the fruit so numerous, as in the Red Dutch and some others, but this is easily accounted for in the size.

Victoria.—This is also a new and very distinct variety, both in fruit and foliage. The bunches are remarkable for their length, frequently measuring six inches, and numbering thirty fruit and upwards in a bunch. The annexed outline is accurately made from an average bush—size in all respects mathematically correct. The plants under ordinary nursery culture. The fruit is in size between the Dutch and the Cherry. The color is a very light, beautiful red; and in season it is later than any other—in fact, they are now in fine condition on the bushes, (August 20th,) and to all appearances will remain much longer. The wood is stout, but less so than the Cherry. The foliage is dark colored, thick, and flat, or a little reflexed or turned backwards at the edges.

White Grape.—This differs from the White Dutch in being very much larger. The bush is more spreading in its habit, has thicker, darker, and flatter foliage. It bears in the greatest profusion.

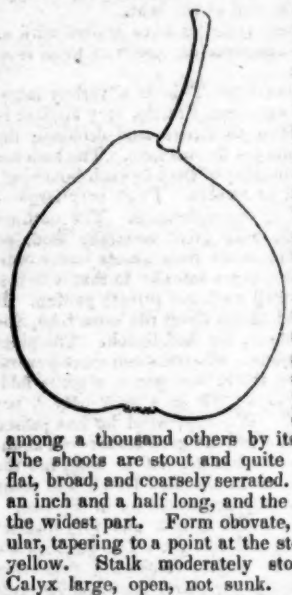
Knight's Sweet Red is a degree milder than the Dutch; in other respects it seems little better.

"Red Astracan" and "Northern Spy" Apples.—Mr. Barry:—I thank you for the "Red Astracan" apples you were so kind as to give me, and am delighted to find them so fine a fruit. They are beautiful in color, very delicate, crisp, and juicy; and being early, are a most desirable variety. I am pleased to tell you that I have made my annual visit to the twenty-three "Northern Spy" trees of Mr. Hand, and found them well laden with fruit. The apples are about half grown now, and are looking fine. I have engaged one hundred barrels of the fruit. I wish all the doubters, as regards the thriftiness of the growth of the tree, its productive qualities, beautiful form and quality of the apple, could see them. One nurseryman who went with me, exclaimed that the growth of the tree was greater by one-third, than that of any other apple trees he had seen. *He* is a "convert" at least.

The fruit generally will not equal the crop of 1848; but Western New York will produce a fair quantity, and of excellent quality, this year. J. H. Watts.—*Rochester*, 1850.

MUSCAT ROBERT PEAR

This nice little early pear, though an old variety, is very little known. We do not propose to commend it for general cultivation; but in large or moderately large collections, it is certainly desirable. It is decidedly superior to *St. John's* or *Little Musk*, that precede it, and nearly equal to the *Madelaine*, which ripens about the same time.—Downing says "it might be called first rate, if we had not the *Bloodgood* to compare with it;" but it is quite over with us before the *Bloodgood* begins to ripen. The tree is a strong, handsome grower, one of those so distinct in appearance as to be easily recognized among a thousand others by its wood and foliage. The shoots are stout and quite yellowish. Leaves flat, broad, and coarsely serrated. Fruit small, about an inch and a half long, and the same in diameter at the widest part. Form obovate, or top shaped, regular, tapering to a point at the stem. Skin greenish yellow. Stalk moderately stout, an inch long. Calyx large, open, not sunk. Flesh white, crisp, juicy, and sweet, with a slight musky flavor. Tree very vigorous and productive; succeeds well on the quince. Beginning of August.



TRANSACTIONS OF THE NEW YORK STATE AGRICULTURAL SOCIETY, FOR 1849.

We are indebted to B. P. Johnson, Esq., the Secretary, for a copy of this great volume. It numbers nearly one thousand pages; being, in fact, an agricultural library in itself. It gives us the proceedings of all the meetings of the Society; full and detailed reports of all committees; transactions of forty-six county societies; discussions and communications on various subjects; Prof. Johnston's Lectures; and Prof. Norton's work, The Elements of Agriculture, complete: the whole arranged in the best manner for reference, and illustrated with ten or twelve beautiful engravings, including the Show Grounds at Syracuse, Floral Hall, various animals, besides outlines of fruits, implements, &c.

This is by far the most important volume the Society has yet published, and affords most ample proof of the great influence it is exerting on the agriculture of our State. Mr. Johnson is entitled to the highest credit for the industry, taste, and judgment which he has brought to bear in the collection and arrangement of such a vast amount of material. The contents will be reviewed at length in the Agricultural Department, and it will, therefore, be unnecessary for us to say more.

The committee on Fruits, of which Doct. Herman Wendell is chairman, suggests the following varieties as worthy of being added to those heretofore recommended for general cultivation:

Apples—Domine, Wine Apple, and Peck's Pleasant.

Pears—Doyenne d'Ete, Andrews, Flemish Beauty, and Urbaniste.

Plums—Madison.

Cherries—Knight's Early Black, Graffion, Black Eagle, and Downer's Late.

Peaches—Oldmixon Freestone, Bergen Yellow, and Crawford's Late.

Gooseberries—Woodward's Whitesmith, Crown Bob, and Green Walnut.

Currants—Knight's Sweet Red, White Grape, and May's Victoria.

Raspberries—Fastolff, Franconia, and White Antwerp.

HOVEY'S SEEDLING STRAWBERRY.

Mr. Editor:—I procured twenty-five small plants of *Hovey's Seedling* strawberry, from the garden of Col. Young, of Ballston, four years ago. From a bed of these plants, 25½ by 18½ feet, I have this season picked 47½ quarts of most delicious berries. Their size varied from 1½ to 3⅝ inches in circumference. The vines in my bed were of two and three years growth. They were first planted in rows about 18 inches apart each way. The runners were permitted to catch and grow, until the vines covered the ground. They were then thinned, so that the plants stood about four inches apart. They were hoed once in the spring, the ground loosened pretty deep with the fork end of the garden hoe, and a coat of compost made of fine barn-yard manure and lime, was spread on the ground around the plants, half an inch thick. This is all the care they require. I do not cover them in the winter.

From their flavor, ease of cultivation, hardihood, and yield, I would recommend *Hovey's Seedling* as the best strawberry that can be raised in our country, as far as my experience goes. Henry Palmer.—*Groom's Corners, Sar. Co., N. Y., Aug.*, 1850.

DOUBLE BALSAMS—"LADY'S SLIPPERS."

Very few people know how really perfect and beautiful these flowers may be grown. On the 11th of August we noticed a dish of them from Prof. Hill, of Rose Cottage, in this city, the best we have ever seen—large, perfectly double as the finest rose, and of almost every shade of color—striped, mottled, and marked with endless variation. Whatever Mr. Hill does, he does it not only *well*, but in the *very best manner*. His melons and tomatoes are always unrivalled; and his rose pillars, his trellises of morning-glory and cypress vine, and the lawn about his cottage, are all models so well managed in all respects, that the first conclusion we arrive at in seeing them, is, that they can be no better.

We know of no such small place as Mr. Hill's; and we advise those who wish to know how many beautiful and excellent things can be produced, and how much taste displayed on a small city lot, to visit Rose Cottage, on Bowery-st., Rochester.

Answers to Correspondents.—Mr. Joseph Pennington, of Macon, Mich., writes us that in the fall of 1847 he was in Rochester, and saw a large red apple "similar in shape to the *Yellow Bellflower*, but two or three times as large." It was said to have been brought from the town of Greece. Mr. P. wishes to know its name and qualities.

We know of no apple two or three times the size of the *Bellflower*, of any shape or color. The largest apples that usually make their appearance here in the fall, are the *Cabashea* and *Twenty Ounce*, both magnificent, showy, red apples. The former is coarse and of poor flavor; the latter is of good quality, excellent for baking, and keeps through January. Both are very productive.

Ladies' Department.

TREATMENT OF CLIMBING ROSES.

THERE is now "a rose tree in full bearing" at Whitestown, Oneida county, which measures 42 feet in height, and bears upon its branches 700 roses and 200 half developed buds. So says the Utica Gazette, and challenges the world to equal this floral wonder.

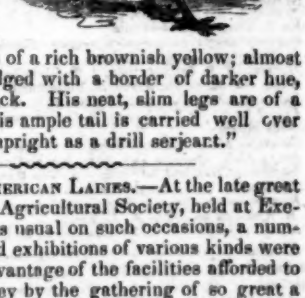
The above we have seen in several papers. We have no disposition to beat anybody, but we think we have some roses that are fine for their age. Running up the front of our cottage we have three Creeping or Running Roses, that during their season were much admired by all who saw them. Passers by would stop and wonder, and many were the inquiries made "where such roses could be had."—Many applications have we had for "*slips*" and "*roots*," as though they were some peculiar and rare sorts. Our answer invariably was, "You can get them at any of the nurseries for *two* or *three* shillings each." Persons who undoubtedly had seen the same kinds a thousand times, and perhaps had them in their own garden, would often exclaim, "I never saw such roses." One of them is the common *Red Boursault*, or *Multiflora*, as it is commonly called; one the *Queen of the Belgians*, a white Ayrshire Rose; and the other the *Queen of the Prairies*. They were planted in the spring of 1848, though so late as to make but very little growth that summer. In the spring of 1849, strong shoots started from the roots, when we cut away all the old wood and preserved four or five of the strongest shoots, carefully training them to the house. The growth of these young shoots was from twenty to twenty-five feet—the shortest growth was twenty feet—some of them going to the roof of the house, and hanging pendant from the cornice, appearing like drooping roses.—Thus the house was nearly covered with strong, straight shoots, which blossomed this year very abundantly. The idea of counting them would have been almost a hopeless task. As fast as the flowers faded they were cut away, and now vigorous shoots are being thrown out, some of which we shall preserve, to extend to the cornice those shoots that did not reach it last year. Some of the side shoots we shall train where they are required to cover the entire front, when they will be shortened; others we shall cut away altogether. There was nothing remarkable about the treatment of these roses. When they were planted, we made a large hole and filled up the greater part below and around the roots with turf from an old pasture, which we intended should rot and form a good mold for the roots by the time they extended to it. We then placed the roots in the hole and filled up with fine garden mold. Since that time we have supplied them with manure from the hen-house. In the spring, when we saw the buds putting out so liberally, fearing they would tax the strength of the plant too much and not liking to thin them, feeling it would be the worst of sacrilege to destroy so beautiful a flower in the bud, we manured them liberally with liquid manure, made by putting something like a peck of hen manure in a barrel, about the size of a flour barrel, and filling up with water. This stood about twenty-four hours, being several times stirred, when it was freely applied to the roots. This was in just the condition to be taken up by the roots, and the plants were thus enabled to bear thousands of beautiful blossoms without overtaxing their energies and injuring their growth.

ENGLISH LADIES' SPORTS

WE have occasionally spoken of the advantages of out-door exercise in securing health and happiness, and endeavored to excite in our fair readers a love of nature. Those who really love nature will often be found in her temple—they will worship her there. We have often, too, spoken of the custom of English ladies, who pride themselves on their skill in cultivating fruits and flowers, rearing poultry, &c. We have recently met with an article in an English paper which we thought we might copy to advantage, as illustrating the facts stated. But we have not spoken from the opinions of others, nor from newspaper reports, as we have told only what we have seen for ourselves.

BANTAMS—*Sport in the Drawing Room.*—On Saturday, the 1st of December, Beacon Lodge, the residence of Mr. and Mrs. Berkeley, was opened for the reception of visitors to witness a show of beautiful bantams, the property of the Marchioness of Hastings and the Hon. Mrs. Berkeley, for a prize. The smallest bird to be adjudged the winner. Three two years old hens to be shown by each lady. A diminunitive hen, weighing only nine ounces and three quarters, the property of Hon. Mrs. Berkeley was adjudged the winner. Among the guests who partook of the hospitalities of the table, were the Marchioness of Hastings, and Capt. Yelverton, Col. and Mrs. Clinton, Maj. and Miss York, &c.

The variety of Bantams exhibited is not stated, but we suppose it to be the *Sebright*, as we believe it is the smallest and most beautiful yet known, a very fair representation of which is given in the engraving.—They are named after Sir J. SEBRIGHT who is said to have originated the variety. DIXON gives the following musical description: "pretty, certainly, and very smart, but shamefully forward in his ways. His coat is of a rich brownish yellow; almost every feather is edged with a border of darker hue, approaching to black. His neat, slim legs are of a light lead color; his ample tail is carried well over his back. He is upright as a drill serjeant."



MANNERS OF AMERICAN LADIES.—At the late great Fair of the Royal Agricultural Society, held at Exeter, England, as is usual on such occasions, a number of of shows and exhibitions of various kinds were present, to take advantage of the facilities afforded to make a little money by the gathering of so great a crowd. Among the rest was a *Troupe* of *American lady Equestrians*. Some of the editors, it appears, gathered from the exhibition some new ideas of the manners and customs of American ladies, not yet in the books. The following extract is from the *Western Times:*

We hope that these fair equestrians are not a sample of the riding habits of the fair ladies of America, for it would be very alarming to see a lady spring upon the back of a horse and gallop, all standing, through the streets of New York—and yet a traveller endeavored to assure us that that was the general custom of the American ladies.

Editor's Table.

NEW YORK STATE FAIR.—Though the New York State Fair is only a *State Fair*, yet the fact that the New York State Agricultural Society, under whose direction the Fair is held, is the most efficient society in the Union, has given the Fair of this State something of a national character. Individuals from all parts of our own, and from other countries, come to this great festival as the great *American Agricultural Fair*. Other States may ere long rival it, and take away this national character. In the mean time we are happy that its lofty position is well sustained, and that the SOCIETY and its FAIR is an honor to our whole country. The next exhibition is to be held at Albany, on the 3d, 4th, 5th, and 6th of September. The grounds belonging to the Bull's Head Tavern, on the Albany and Troy road, have been selected. The buildings and other arrangements are completed or in progress, and they are on an extensive scale. Everything possible will be done by the officers of the Society for the accommodation of articles exhibited, and for the comfort and convenience of those attending the Fair. We have every reason to suppose that it will be equal, if not superior, to any previous one.

Persons attending the Fair will be carried on all the railroads, we believe, at half price; and stock, implements, &c., free. Persons in this section desiring information in regard to the starting time of different trains, &c., can correspond with JAMES P. FOGG, of this city, who will do all in his power to facilitate the forwarding of articles designed for the Fair. Hay, litter, and water for the stock will be furnished on the Fair ground without charge. The following is the order of arrangements as published by the Society:

Monday, Sept. 24. Entries to be made at the business office on the show grounds at the Bull's Head, between Albany and Troy, and articles arranged.

Tuesday, 3d. Stock, implements and articles received at the show grounds from 8 o'clock until 5 P. M.

Wednesday, 4th. The grounds *to be open* to the *Judges, Exhibitors, and members* only, from 9 o'clock until 5 P. M.; admission fee $1. The Judges will be called at the Society's Tent at 12, and proceed immediately to the discharge of their duties.

Thursday, 5th. The grounds *will be open to the public* from 8 o'clock until 5 P. M. Single admissions *one shilling*. Members' tickets $1, which allows the member, his wife and family under 21 years of age, admission during the show. The Judges will deliver their report to the Secretary at the business office by 12 o'clock this day.

Friday, 6th. Grounds open to the public from 8 o'clock until 5 P. M. The Address will be delivered on the grounds at 2 o'clock, P. M., by Prof. AMOS DEAN, of Albany. The awards will be immediately announced after the Address, and premiums paid at the business office as far as practicable, and on Saturday, at the Agricultural Rooms in the city.

The Rooms of the Executive Committee will be at the Delavan House where guests of the Society, and visitors and delegates, are requested to call.

COMMITTEE OF RECEPTION AND ARRANGEMENTS AT THE FAIR IN SEPTEMBER.—E. P. Prentice, President; J. P. Beekman, Geo. Vail, John A. King, Ex-Presidents.

SUPERINTENDENTS UPON THE GROUNDS.—*Cattle Department.*—Lewis G Morris, William H. Sotham.

Horses.—J. B. Burnet, Gen. J. T. Blanchard.

Sheep.—J. McD. McIntyre, H. Blanchard.

Swine and Poultry.—Z. C. Platt and T. C. Abrams.

Floral Hall.—A. Thompson, M. D., Herman Wendell, M. D., W. A. McCulloch.

Domestic Hall.—Oliver Phelps, E. C. Frost, D. D. T. Moore.

Dairy Hall.—Nelson Van Ness, Joseph Cary.

Implement Hall and Grounds.—A. Van Bergen, H. L. Emery, N. B. Starbuck.

Entrances and General Superintendence of Grounds.—H. Wager B. B. Kirtland and Gen. J. J. Viele.

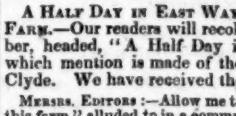
Machinery, &c.—C. C. Dennis and L. B. Langworthy.

Musical Exhibition.—The Albany Harmonia Society will perform on the evenings of the 3d, 4th, 5th, and 6th, HAYDN'S celebrated "*Oratorio of the Seasons*"—the most appropriate that could be selected for the occasion. THOMPSON'S SEASONS is truly the *Farmer's Song*, and we anticipate a rich treat. We understand the best musical talent of the country has already been engaged for the occasion. The officers will accept our thanks for their complimentary invitation.

THE UPPER CANADA AGRICULTURAL FAIR for the present year being held at Niagara, the 18th, 19th, and 20th of September, in the neighborhood of Niagara Falls, will undoubtedly attract a large concourse of people. Those who have been waiting for a convenient opportunity to see the great falls, should embrace this occasion to attend the Fair, and see this great natural wonder.

A HALF DAY IN EAST WAYNE COUNTY—MR. WATSON'S FARM.—Our readers will recollect an article in the last number, headed, "A Half Day in East Wayne County," in which mention is made of the farm of JOSEPH WATSON, of Clyde. We have received the following from friend W.:

MESSRS. EDITORS:—Allow me to speak of *one* item "peculiar to this farm," alluded to in a communication of R. G. P., of Palmyra, in the August number of the Genesee Farmer. I took the hint of *this peculiarity* from a communication in a back volume, page 45, February number, 1848, from S. H., of Batavia, which is worth more to me than all the Farmer has ever cost me. Upon his way of making fence with *wooden* caps, I claim an improvement. I lay



my rail fence in the usual way, four or five rails high, then set a pair of stakes, of any kind of timber, perpendicular, on the same side of the fence, on the ground close in the corners, (see dots in engraving,) and with a coil of No. 10, annealed wire at my feet, a hook formed in a loose end, which is passed around said stakes and the wire drawn through this hook until *just* tight enough, then bent back, which forms two hooks connected, and completes the cap; then with a few cuts of a file, the coil is separated from the cap; then put in above the cap three or four rails, and a good fence is the result. Expense of wire, at 7 to 7½ cts. per lb., is a fraction over one cent per corner, which is less than the cost of timber, and saves boring holes and shaving stakes. Brother farmers, try it, and if it don't pay, charge the loss to your humble servant. JOSEPH WATSON.—*Clyde, N. Y., Aug*, 1850.

FAIR OF THE ROYAL AGRICULTURAL SOCIETY, ENGLAND.—We are indebted to Col. L. G. MORRIS, of Mt. Fordham, N. Y., now sojourning in England, for English papers containing an account of the great Fair of the Royal Agricultural Society, held at Exeter during the week ending on the 20th of July. The show is represented as being the very best ever given by the Society. A great dinner was given in the pavilion on the last day of the Fair, at which an immense multitude partook of the good things Englishmen know how to provide and appreciate. Englishmen can't do anything of importance without a good dinner. The American minister to England, Mr. LAWRENCE, and WM. C. RIVES, the American ambassador to France, took part in this festival, together with most of the foreign ministers. Both the American ministers made very fine speeches. At the conclusion of Mr. LAWRENCE'S address, a loud call was made for Col. MORRIS; but a programme of the speakers having been previously prepared by those having the management of the festival, it was adhered to, although there was a general anxiety to hear Mr. MORRIS.

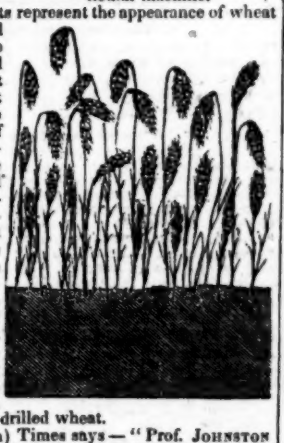
MONROE COUNTY FAIR.—It is the intention of the officers to make the coming Fair of this Society both interesting and profitable. It is to be held in Rochester on the 24th, 25th, and 26th of September. The last day is for the sale of articles. Many have complained that there has been no such opportunity at our previous Fairs. The Society, therefore, concluded to hold the Fair *three days*, instead of *two* as usual, affording a good opportunity on the third for the purchase and sale of any articles that may be offered. Many of our citizens, who have *taste* to distinguish between *butter* and *grease*, are making calculations to supply themselves with their winter stock of butter and cheese at our County Fair. We have no doubt this arrangement will be a mutual benefit to both buyer and seller. Mr. JAMES P. FOGG will, at any time previous to the Fair, take charge of articles designed for exhibition or sale.

OHIO STATE FAIR.—The Ohio State Board of Agriculture are determined to make their next exhibition in Cincinnati every way creditable. It is to be held on the 11th, 12th, and 13th days of September. The Ohio Mechanics' Institute gives an exhibition, and the American Pomological Congress hold their annual meeting in Cincinnati at the same time. The Board have made arrangements with the railroads to carry articles to and from the Fair free, and passengers at half the usual price.

WE are indebted to friends for many valuable pamphlets, premium lists, &c. The *Transactions of the Michigan State Agricultural Society* is quite an interesting volume of 234 pages, containing the Constitution of the Society, a list of the officers, the Address delivered at the last State Fair, the Report of the Executive Committee, Reports of the County Societies, and other valuable matter. The State Society was organized on the 17th of March, 1849, and this volume speaks well for its efficiency.

WHEAT CULTURE.—We have taken particular pains the present season to ascertain the condition and yield of the wheat crop, and the effects of different modes of culture. The crop in Western New York we should think is more than an average one, and though the weather during a part of the harvest was quite unfavorable, owing to continual showers, yet much less loss resulted than was at the time anticipated. We hear of but very little wheat materially injured. Less wheat, probably, was planted by drilling in this neighborhood, than the previous year. This was caused, undoubtedly, by the imperfect operation of some of the drills used. We saw one piece of wheat in this county that yielded but fifteen bushels to the acre. The owner assured us he had every reason to believe the yield would have been twenty-five if it had been sown by hand. It was in irregular clumps, and much of the ground bare. In the same town we examined a field of wheat, one half of which had been drilled in by our friend SPERRY, with Seymour's Drill. It was done by Mr. S. for the owner of the farm, as an experiment, and those who saw the field expressed the opinion, and it seemed justified by the appearance of the wheat on the ground, that the drilled portion of the field would yield one third more than that sown broadcast. Farmers, therefore, should not permit themselves to become prejudiced against the *system*, on account of defects in any particular machine.

The accompanying cuts represent the appearance of wheat sown both by the drill and broadcast, at the time of ripening. It will be noticed that the height of that sown broadcast is very uneven, while the upright position of many of the heads, indicates that they are light, not being well filled. This is not, however, a fair representation of the ground at harvest; the drill leaves the ground in ridges, as seen in the engraving, but these ridges are worn down by freezing and washing, and at harvest the ground appears nearly level. It is this filling up of the hollows that to so great an extent prevents the freezing of drilled wheat.



The Exeter (English) Times says—"Prof. JOHNSTON said in a lecture, last week, before the East of Berwickshire Farmers' Club, 'in New Brunswick, New England, Vermont, New Hampshire, Connecticut and New York, the growth of wheat has almost ceased, and it is now gradually receding farther and farther westward. Now, when I tell you this, you will see that it will not be very long before America is unable to supply us with wheat in any large quantity. If we could bring Indian corn into general use we might get plenty of it.'"

We hardly think New York is prepared to give up raising wheat, nor do we think the quantity grown in the least diminishing. The Lockport Courier estimates the present wheat crop of Niagara County at one million bushels, which considering that it is one of the smallest counties in the state, is certainly a very large yield. The estimate may not be correct, but it shows, at least, the opinion of one having good opportunities to judge, and that the farmers of Niagara Co. have little thoughts of relinquishing wheat culture.

The Editor of the Albany Journal, who has been on a trip through the State, speaks thus of what he saw:

"Never has the teeming earth yielded her treasures with a more bountiful hand. Never did 'seed time and harvest' promise more abundant reward to the husbandman. Onondaga, Cayuga, Seneca, Ontario and Monroe, are in a truly palmy condition. Ontario and Monroe resemble the richest and best cultivated portions of England and Belgium. We have never seen in that portion of our State, so many acres promising a larger yield or better wheat"

The Editor of the Rochester American says:

"The quantity of wheat raised in Western New York this year is very great. There was a very large number of acres sown last fall, and the seasons have been as favorable as could be desired for the growth and ripening of the grain. The quality of the wheat is rarely better than it is this year."

We hope, and we have good reason to believe, that those who prophesy the abandonment of wheat growing in this State are false prophets, and those who are making calculations on such a state of things are doomed to disappointment.

Samples of new varieties of wheat have been distributed through the Patent Office to our farmers, and many thus favored have grown and preserved it with care, and now are prepared to furnish their neighbors with the new kinds, for seed. E. CORNELL, of Ithaca, N. Y., writes us that he has the *Etrurian* Wheat, procured from Mr. ELLSWORTH, while Commissioner of Patents, some six years since. Mr. C. says: "It has grown entirely free from chess, smut, rust, and weevil. The straw is stiff and not subject to crinkle; just previous to ripening it assumes a beautiful purple color which changes in ripening to a golden yellow. It is the bald variety, a white or very light yellow berry, which is enclosed sufficiently firm by the husk to prevent waste in harvesting, and not so tightly set as to thresh hard. It is very hardy, stands the winter well, and grows as well in the wet and low grounds, apparently, as on the more elevated and dry. For flouring it is unsurpassed. It yields more pounds per bushel measure than any other variety I know of, and the yield of flour is proportionably large." It is offered for sale by Mr. C. at Ithaca, for $2 per bushel.

TIMOTHY JUDSON, of Salem Cross Roads, Chenango Co., N. Y., has the *White Blue Stem* wheat, also obtained at the Patent Office. Mr. J. says: "I do not know how it has succeeded in other regions, but I am satisfied that it is the best variety raised here, the quantity produced being greater, and the quality superior to any other. It has been said that it will not rust, and that the Hessian fly will not injure it. I can say that since I have raised it, neither the rust or fly have troubled it and one season the fly injured the flint wheat very much, while the blue stem was untouched."

Mr. Judson was awarded the first premium for specimen of this wheat, exhibited at the last State Fair. Mr. J. offers this wheat to farmers, for seed, at $2 per bushel, at his residence, and if a barrel or more is ordered, he will deliver it at Dunkirk.

We have received from the author the following communication, with a requst for insertion in the Farmer previous to the State Fair:

"Having been forced into a discussion as to the relative merits of 3d Duke of Cambridge and Mr. Vail's Duke of Wellington, and Mr. Vail still insisting that Wellington is the better bull, because Mr. Bates so wrote him, I invite Mr. V. to show both his bulls, Duke of Wellington and Meteor, at Albany, at our next great State Show, along side of Cambridge, that the public may there compare them and see the character of each. A. STEVENS."

By a list of the books in the State Agricultural Library, published in the Transactions, we perceive that it consists of more than 600 volumes, about 100 of which have been added during the last year, principally by donations.

STATE FAIRS FOR 1850.—State Fairs for the present year will be held as follows:

New York—at Albany, Sept. 3, 4, 5, and 6.
Maryland—at Baltimore, Oct. 23, 24, and 25.
Ohio—at Cincinnati, Sept. 11, 12, and 13.
Michigan—at Ann Arbor, Sept. 25, 26, and 27.
New Hampshire—first week in October.
Rhode Island Imp. Society—at Providence, Sept. 18th, 19th, and 20th.
Georgia—at Atlanta, August 15.
Upper Canada—at Niagara, Sept. 18, 19, 20.

THE cultivation of the heart should be like that of a garden, where we prune and weed before we begin to plant.

Emery & Co's. New Thresher and Cleaner.

FOR nearly two years we have been experimenting to perfect a Cleaner, to be operated with our power for public and field threshing; and at the expense of much time and several hundred dollars, we have succeeded to our entire satisfaction, and now are prepared to furnish a Cleaner combined with all the advantages of our overshot cylinder, and at the same time requiring less force to operate its rotary motion than is required by the vibrating separator. We have tested it very thoroughly during last harvest, and some of them have been used the past reason for public threshing in the best grain growing sections of the State, with the best success,—threshing months together an equal amount, and at less expense, than the common threshers with the vibrating separators.

The Cleaner has all the advantages of a good fanning mill, cleaning the grain fit for market, and wasting none. The additional cost being not more than an ordinary fanning mill, or about *thirty dollars*,—making the whole Thresher and Cleaner cost $75 to the farmer. The Cleaner can be detached, and the Thresher used alone when desired.

N. B. The above Threshers and Cleaners, as also an improved Railroad Horse Power, will be supplied by J. P. Fogg, No. 14 Front st., who is our only agent for them in Rochester, and of whom only can they be obtained there. The prices will be—

For Single Power,	$85
" Thresher and Separator,	35
" Bands, Wrench, Oil Can, extra pieces,	5—125
" Two Horse Power,	110
" " Thresher and Separator,	55
" Bands, oiler, wrench &c.,	5—150
Also, Wheeler's one Horse Power, Thresher and Separator, complete. (improved this season.)	120
Wheeler's two Horse Power, Thresher and Separator, complete,	145
Emery's Thresher & Cleaner, with bands, wrenches, &c.,	75
" Saw Mill, complete for use,	55
Grant's Fan Mills, adapted for hand or power, from	$22 to $28

Manufactured and for sale at their Agricultural Warehouse & Seed Store, 369 and 371 Broadway, Albany, N. Y.

Sept. 1850. EMERY & CO.

GREAT SALE OF FRUIT AT AUCTION.

THE WHOLE STOCK OF A NURSERY TO BE SOLD AT AUCTION, SEPTEMBER 20th, 1850.

THE Proprietors of the Lake Erie Nursery, Cleveland, Ohio, being about to make a change in their business, will sell their entire stock of Fruit and Ornamental Trees, Shrubs, Roses, &c. &c., at Public Auction, and without reserve, on Wednesday, the 20th September next.

The collection embraces all the choice leading, and new varieties of Fruits; rare Ornamental Trees, Shrubs, &c., and in extent of variety and correctness to name, is probably surpassed by no Nursery at the West.

The stock of Pears on free stocks, and dwarfed on Quince, is very good, and also Cherries, Apples, Peaches, Plums, Grapes Quinces, Currants, Raspberries, &c. &c.

Among the Ornamental Trees and Shrubs, there are plants from one year's growth to an extra size, and the stocks of Mountain Ash, Scotch Larch, Deciduous Cypress, Norway and Silver Maples, European Lindens, Horse Chestnuts, Kentucky Coffee Trees, Garland Deutzia, Daphne Megereon, Monthly Chinese Evergreens, and Tree Honeysuckles, &c. &c., are especially good.

The stock of Evergreens is large, and most of them having been twice transplanted, they are in excellent condition to be removed.

The sale will be made in lots of 10 to 100 trees or plants in each lot. The correctness of varieties may be relied upon, and purchasers can have the privilege of removing their trees at any time previous to the 20th May, 1851.

The purchaser can dig and remove his trees himself, or the proprietors will do it for him, charging him the usual price of packing, &c.

The terms of sale, unless otherwise agreed upon with individuals, will be as follows:

For all sums under Twenty Dollars, cash

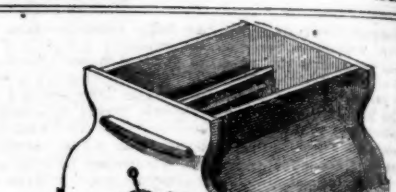
Over Twenty and under Fifty, 30 days.

Over Fifty and under One Hundred, 4 months.

Over One Hundred, six months, approved Notes payable at Bank.

Catalogues will be issued about the 15th of August, which we shall take pleasure in forwarding to any persons who may desire. All communications of inquiry, &c., addressed to the subscribers, will meet prompt attention. ELLIOTT & CO.,

Sept, 1850. Lake Erie Nursery, Cleveland, O.



Compressing and Thermometer Churn Combined.

THIS combination and arrangement forms the best hand churn now before the public.

It has the Double Zinc Cylinders for facilitating the process of obtaining the proper temperature by means of hot or cold water, without mingling it with the milk and cream. A Thermometer is neatly set in one end to enable the operator to know the proper degree of temperature at which to commence churning. The bevel floats which have been before described, are used without any shaft through the churn, by having a dowel at one end, and a square socket at the other, which receives the end of the short crank when it is suspended and propelled. The crank has a groove turned in its round part to receive a pin, which pin drops into the groove when the crank is in its place. To wash and take out the butter, all that is necessary is to raise the pin and withdraw the crank far enough to relieve the dasher, when it is readily taken out.

They are manufactured and sold, wholesale and retail, at the lowest prices, (the cost being but trifling above Kendall's, of corresponding sizes,) by EMERY & CO.

At the Agricultural Works, Warehouse, &c.

Sept. 1850. Nos. 369 & 371 Broadway, Albany, N. Y.

Allen's Improved Portable Railroad Horse Power, Thresher, and Separator.

THE advantages of the above horse power, are—1. They occupy but little more space than a horse. 2. They can be moved by the weight of the horse only, by placing the machine at an angle of 10 or 15 degrees. 3. They are easily transported, simply constructed, not liable to get out of order, and move with little friction.

The Overshot Threshers consist of a small-spiked cylinder, with a concave top, and possesses these advantages. 1 They have a level table for feeding, thus enabling the tenders to stand erect, and control the motions of the horse and machine by means of a brake, by which accidents are avoided. 2. In consequence of the spikes lifting the straw and doing the work on the top, stones, blocks, &c., drop at the end of the table, and are not carried between the spikes. 3. The overshot cylinder does not scatter the grain but throws it within three feet of the machine. 4. This arrangement also admits of attaching a *separator* high enough from the floor or ground to allow all the grain to fall through it, while the straw is deposited by itself in the best condition for binding. 5. Neither grain nor straw are broken by this machine. 6. The cylinder is long, which admits of faster and more advantageous feeding; it is smaller and with fewer teeth than ordinary threshers, thus admitting of more rapid motion and faster work with less power; and the diminution of teeth in the cylinder is fully made up by an increased number in the concave top, which is stationary. 7. The seperator is a great advantage in diminishing the labor of raking out the straw, as it leaves the grain in the best condition for the fanning mill. Three men with a single power, can thresh 100 to 150 bushels of grain per day; and four men with a double power, twice that quantity. All the above are compact and can be carried where wanted, complete, or they may be readily taken apart and packed for distant transportation by wagon or otherwise.

Price of single Power,	$80
" " Thresher,	$28
" Seperator and fixtures,	$7
" Bands for driving, etc.,	$5
" Wood-sawing machine, complete, and in running order,	$35.
Price of Double Power,	$100
" with Thresher, Seperator, &c.,	$145 to $150

All the above are sold singly or together, as desired, and are warranted to work well and give satisfaction.

Also, Taplins 20 feet circular, and the Cast Iron Sweep Powers. Enquire at the New York Agricultural Warehouse and Seed Store of A. B. ALLEN & CO., 189 and 191 Water st., New York.

BACK VOLUMES of the Farmer we can furnish bound. Also, all works on Agriculture and Horticulture, Poultry, Sheep, &c.

SENECA LAKE HIGHLAND NURSERIES,

CATHARINE, CHEMUNG COUNTY, N. Y.

E. C. Frost, Proprietor.

FRUIT TREES of all kinds, Ornamental Trees and Shrubs, Grape Vines, Hedge Plants, Box for edging, Strawberries, Dahlias, Green House Plants, &c. &c., in large or small quantities.

The Nursery and Standard Trees cover Forty acres.

The following varieties of Apples can be furnished:

The WAGENER.—For this new variety, the N. Y. State Agricultural Society awarded to Charles Lee, Esq., of Yates Co., the place of its origin, the highest premium in 1847, and again in 1848; also procured a colored plate for a frontispiece to its published Transactions, and gave it a full description, in part as follows: "Texture—Fine grained, crisp and juicy. Flavor—Rich, sprightly, vinous, subacid and delicious Season—From October to May, and a prolific bearer." By refering to Vol. 7, page 60, of the Albany Cultivator, it will be seen that I have had the exclusive privilege of Mr. Lee's trees, and have taken scions from his,—the original seedling tree—and also from others worked from it in the neighborhood, so that those ordering will be sure of the genuine variety. Price of this variety 50 cents each, and scions furnished only in small quantities.

The HAWLEY or DOUSE.—For flavor, size, and productiveness, this is believed to be the best Fall Apple known, either for dessert or market purposes. A description and outline can be seen in the Cultivator of April, 1847, from which we quote: "Of all the varieties of Apples which have lately been brought to notice, probably none is destined to become more popular than the *Hawley* or *Douse*." Also in the Horticulturist of July, 1847; Hovey's Magazine of December, 1847, and the Genesee Farmer of May, 1848; the latter in describing it, adds: "The first time we saw it was at the State Fair at Auburn, in 1846, when it was exhibited by E. C. Frost, of Chemung Co, as the *Douse*. His specimens were monstrous, and we well remember the commotion it created among the Pomologists present, to all of whom it seemed unknown." Trees four years from the graft, 50 cents each. Scions by the dozen or hundred.

The WINTER KING—Is a very showy and productive Apple, cultivated in this and Tompkins Co., where it sells one shilling per bushel higher than that fine and well known variety, the *Swaar*. Twenty-five cents per tree

TOMPKINS—Origin Tompkins Co. An outline and description is given in the Horticulturist of February, 1848. Mr Downing says: "A large, handsome and productive autumn fruit, superior in flavor to the *Porter*. We commend it with confidence to the notice of amateurs and collectors of good fruit." Season—October and November. Twenty-five cents each.

In addition to the above four new varieties, among other standard sorts, are the following: Early Harvest, Large Sweet Bough, Summer Queen, Fall Pippin, Early Joe, Norton's Melon, Swaar, Baldwin, Northern Spy, Roxbury Russet, Ladies Sweeting, Newtown Pippin.

SCIONS.—One or two dozen can be sent by mail, with safety, to any part of the Union, and larger quantities by public conveyance.

Pears and Plums are not affected with the blight.

Eastern fruit growers can procure Peach trees here perfectly free from the *Yellows*, a disease to us unknown.

Trees carefully packed and sent by public conveyance to any section of the United States or Canadas. Being on the Chemung Railroad, which connects the New York and Erie with the Buffalo and Albany route, at Elmira and Geneva. This location for Railroad facilities, is surpassed by none.

Price Catalogues furnished gratis to all post paid applicants, containing an engraving and full description of the Wagener and Hawley or Douse Apples.

Sept. 1850.

Daguerreotypes that are Daguerreotypes.

BROWN & HOWARD'S Emporium Daguerrean Gallery, No. 9, second floor Gould Buildings Having opened a splendid Gallery in the Gould Block, would respectfully invite the public and all those wishing good likenesses, to give us a call, and we will assure them they will not waste time and money, as is often the case. Our Gallery is furnished in a style of unusual splendor, equal to any in the State. The walls are adorned with some of the finest works of Art, both of pencil and engraver.

Strangers visiting the city, and having a few leisure hours, will be amply rewarded by a visit to our Gallery, which will be kept open during all business hours. Please call and examine for yourselves.

WM. BROWN,
JOHN HOWARD.

The undersigned takes this method of informing the citizens of Rochester and vicinity, that by the solicitations of many citizens, he has been induced to return to the city for the purpose of making it a place of permanent location. Having been absent from the city one year, and in constant practice, experimenting in the above named Art, has now returned better qualified than ever, not only to sustain, but excel my former reputation as an Artist, being well known in this city and vicinity, as formerly principal operator in Mercer & Co.'s Gallery, corner of Main and St. Paul streets, would now respectfully invite my old friends, and the public generally, to call at No. 9, Gould Buildings, where you can see likenesses that will speak for themselves.

[7-tf] W. BROWN.

Rochester and Charlotte Plank-Road Nurseries,

ROCHESTER, MONROE CO., N. Y.

THE Subscribers respectfully solicit the attention of Fruit Growers and Tree Dealers to their healthy stock of Fruit and Ornamental Trees offered the ensuing autumn, consisting in part as follows:

Apple Trees—from 6 to 9 feet high, all popular sorts, from $15 to $18 per 100. Northern Spy, in large or small quantities, from 5 to 10 feet high, from $20 to $25 per 100.

Cherry Trees—from 5 to 10 feet high, handsome headed and thrifty trees, from $18 to $25 per 100.

Peach Trees—two years old from bud, free from all diseases, the most esteemed varieties, from $12 to $16 per 100.

Raspberries—Fastolff, Franconia, Red and White Antwerp, $2 per hundred.

Strawberries—Burr's New Pine, Columbus, Rival Hudson, Boston Pine, $2 25 per 100. Hovey's Seedling, and a dozen other sorts, from $1 to $1.50 per 100.

Rhubarb—Giant sort, (true,) the most desirable for market gardeners, an excellent forcer, $10 per 100, $70 per 1.000. Myatt's Victoria Rhubarb, largest in cultivation, $4.50 per dozen.

ORNAMENTAL TREES AND SHRUBS.

European Mountain Ash, from 6 to 12 feet high, very ornamental for cemeteries, avenues, lawns, and streets. $25 per 100.

Norway Spruce, Scotch Pine, Weymouth Pine, Pine Aster, White Pine, Larches, Hemlock, Spruce, from 3 inches to 3 feet high, and some 5 to 10 feet high, at low rates.

Japan Spiræa, (Spiræa prunifolia flore pleno,) from 3 inches to 3 feet high, from $1.50 to $3 per dozen.

Spiræa Lanceolata, Douglassi, Hypericifolia, Thalictrioides, &c., &c., $2.25 per dozen.

Forsythia Veridissima, (Chinese Forsythia,) $2 25 per dozen.

Wigilia Rosea, the most beautiful shrub introduced lately, perfectly hardy. $3 per dozen.

Deutzia Scabra, Cauescens, Nova Japonica Gracilis, $2 per doz.

Twelve varieties of Honeysuckles, including the Chinese, (Lonicera Flexuosum,) $2 per dozen.

Running Roses—Queen of the Prairies, Baltimore Belle, Russel's Cottage, Laura Davoust, Dundee Rambler, Ayrshire, Felicite Perpetuel, and a number of others, $2.25 per dozen. Bourbon, Noisettes, Teas, Hybrid Perpetuals; all robust growers, shrubby habit, such as Malmaison, La Reine, Dr. Morp, Mrs. Elliott, Madam Laffay, Cloth of Gold, Bourbon Queen, Triumphe de la Guillotierre, &c., &c., $3 per dozen.

Privet, for hedges, adapted to cemeteries, makes beautiful garden division hedges. $15 per 1000.

A general nursery collection under extensive propagation.

C. J. RYAN being a regular bred Horticulturist of upwards of twenty years practice, in the first establishments in England and this country, is some guarantee for the accuracy of every tree, plant and shrub sent from this establishment.

A Catalogue of the entire stock will be published next month.

C. J. RYAN & CO., Proprietors.

Sept. 1850.

Pure White Lead.

THE Rochester White Lead Manufacturing Company beg to offer their brands of PURE LEAD to the attention of agriculturists and horticulturists, for painting permanent structures of every description.

This article has been thoroughly tested by the best judges in this city, and pronounced a genuine article. Persons desiring to test the purity of the lead, may have it analyzed by a chemist; and if in any case it should be found impure, we will pay the price of analyzing it, and refund the money for the lead.

Be particular about the brand: "Moulson's, 36 Front street, Rochester," is marked on every keg. Purchasers of lead have occasionally been deceived in buying lead branded as Rochester lead. Mark, *we are the only manufacturers of lead here*. There is, however, a large quantity of lead "fixed over" here. Nevertheless, we wish our lead not to be confounded with that or any other, and therefore desire all consumers to give us a trial.

SAMUEL MOULSON, No. 36 Front st.

Rochester, August 1, 1850. [9-tf]

Miner's Bee Hive.

THIS beautiful and highly valuable practical Hive, is unsurpassed by any other in the United States. The Rights are in pamphlet form, with full engravings, and ample directions to make it. Price $2 only; sent by mail to any section of the country. This is positively the only Hive of *real* merit to be had.

Also, the AMERICAN BEE-KEEPER'S MANUAL, 350 pp., 35 fine engravings; the most popular work ever published on the culture of bees. Price $1; sent by mail also. Address to this office, *post-paid*.

Gen. Farmer Office, Rochester, June, 1850. [6-tf]

TO FARMERS.

CASH PAID FOR RED ROOT SEED AT MY OIL MILL.

M. F. REYNOLDS, manufacturer of Linseed Oil, White Lead in Oil, Sash, Doors, and Blinds, Stained and enamelled Glass;

AND DEALER IN

Paints, Oils, Varnish, Glue, Brushes, &c.; French, English, and American Plate, Crown, and Sheet Glass, French White Looking Glass Plates, &c., 17 Buffalo street, Rochester, N. Y.

CONTENTS OF THIS NUMBER.

Virginia Lands and Farming,..... 201
Patent Office Report, Part II,..... 202
Culture of Indian Corn,..... 202
Smut in Wheat and the cause of it,..... 205
Elder,..... 207
Bees—No. 3,..... 208
Destruction of Insects—Moles,..... 209
ANSWERS TO INQUIRIES.—Scientific Farming,..... 209
Draining; Profits of Poultry, &c..... 210
Guano and Lime,..... 211
Review of the Transactions of the N. Y. State Ag. Society,.. 212
Ayrshire Bull, Dandy,..... 213
Chapin's Portable Cider Mill and Press,..... 213
Barns and Farm-Gates,..... 214
S. W.'s Notes for the Month,..... 214
LADIES' DEPARTMENT—Treatment of Climbing Roses,..... 219
English Ladies' Sports,..... 219
Manners of American Ladies,..... 219
EDITORS' TABLE—New York State Fair; Mr. Watson's Farm; Fair of the Royal Agricultural Society, England; Wheat Culture, &c.,..... 220

HORTICULTURAL DEPARTMENT.

Selection of varieties of Fruits,..... 215
The Currant,..... 216
Muscat Robert Pear,..... 218
Hovey's Seedling Strawberry; Double Balsam,..... 218
Answers to Correspondents,..... 218

ILLUSTRATIONS.

Ayrshire Bull, Dandy,..... 212
Chapin's Portable Cider Mill and Press,..... 213
Farm Gate,..... 213
May's Victoria Currant,..... 216
Cherry Currant,..... 217
Muscat Robert Pear,..... 218

Buffalo Nursery and Horticultural Garden.

THE Proprietor of this old established Nursery, would call the attention of Fruit Growers, Nurserymen, and others, to the very large assortment of Fruit and Ornamental Trees, Flowering Shrubs, &c, now offered for sale. The Fruit Trees are vigorous and healthy, nearly all of which have been propagated from bearing trees growing in his own grounds.

Apple Trees—a very large stock of the most choice sorts, by the thousand, at very reduced prices. Pyramidal Dwarf Pear Trees—a fine assortment of beatiful Trees. The stock of Cherry Trees are also very fine, comprising the most select and noted varieties. Also, a good assortment of the Peach, Pear, Plum, Apricot, Quince, and all the smaller fruits.

The assortment of Ornamental Trees, Flowering Shrubs, &c., comprises almost every desirable article. The stock of Evergreen Trees is truly fine. Annual importations are made from Europe of new and rare varieties of Fruit, Roses, &c. Apple, Cherry, Quince and Plum stocks by the quantity; and Nurserymen supplied with trees of large or small size at low prices.

Orders by mail, or otherwise, and all letters of inquiry, will receive the most prompt attention. Every article carefully labelled, securely packed, and forwarded with the least possible delay.

Descriptive Catalogues (a pamphlet of 60 pages) sent gratis to all who apply, postage paid. B. HODGE.

Buffalo, N. Y., Sept. 1, 1850. [9-1t*]

To Fruit Growers and Nurserymen.

ELLWANGER AND BARRY solicit the attention of all tree planters, Nurserymen and Dealers to their present stock, which is much larger and better than they have ever before had the pleasure of offering.

It embraces, among other things, in large quantities,

Standard Fruit Trees, of all sorts.

Dwarf and Pyramidal Fruit Trees, for Gardens.

Gooseberries, Strawberries, Raspberries, Currants, &c., all the newest and best kinds.

Ornamental Trees, Shrubs, Roses, &c., including all new, rare and desirable articles.

Buckthorn, Osage Orange and other Hedge Plants.

Stocks of all sorts for Nurseries.

Green House, Border and Bedding Plants.

Double Dahlias, &c., in immense quantities.

Wholesale prices furnished when desired.

A new edition of the general descriptive Catalogue is now ready and will be sent gratis to those who apply post paid.

Mount Hope Garden and Nurseries,
Rochester, N. Y., Sept. 1, 1850.

Agricultural and Horticultural Implements, and Field and Garden Seeds.

UPWARDS of *one hundred* kinds of Plows, and a corresponding variety of all other implements for the farmer, planter, and gardner; embracing the largest and most complete assortment to be found in the United States. Also, Field and Garden Seeds—a large and varied assortment. A. B. ALLEN & CO.,

August, 1850. (8-tf-e) 189 and 191 Water st., New York.

BOOKS ON AGRICULTURE, &c., &c.,

For Sale at the Office of the Farmer.

The Publisher of the FARMER keeps constantly on hand a large assortment of the most popular and valuable works pertaining to Agriculture, Horticulture, and Rural and Domestic Economy, which will be sold at the lowest cash prices. The names and prices of a portion of the books are annexed:—

American Agriculture, by Allen. $1.
American Farm Book. $1.
American Poultry Yard, by Browne. $1
American Shepherd, by Morrell. $1.
American Veterinarian, by Cole. 50 cents.
Buel's Farmer's Companion. 75 cents.
Buist's Kitchen Gardener. 75 cents.
Chaptal's Agricultural Chemistry. 50 cents.
Coleman's Continental Agriculture. $1.
Complete Farmer. $1.
Cole's American Fruit Book. 50 cents.
Domestic Animals, by R. L. Allen. Cloth, 75 cts.; paper, 50 cts.
Downing's Fruits and Fruit Trees of America. $1 50.
Downing's Landscape Gardening. $3 50.
Essay on Manures. 25 cents.
Farmer's and Emigrant's Hand-Book. $1.
Farmer's Manual.
Gardener's Farmer's Dictionary. $1 50.
Home Doctor. 25 cents.
Horse Doctor. 25 cents.
Horse's Foot—and how to keep it sound. 25 cents.
Johnson's Agricultural Chemistry. $1 25.
Johnson's Dictionary of Gardening.
Kirby & Spencer's Entomology. $2.
Knowlson's Complete Farrier, or Horse Doctor. 25 cents.
Ladies' Companion to the Flower Garden. $1 25.
Liebgig's Agricultural Chemistry, (new edition.) $1—paper, 75 cts.
Liebgig's Agricultural and Animal Chemistry, (pamphlet sections.) 25 cents each.
Loudon's Ladies' Flower Garden. $1 25.
Mason's Farrier and Stud Book. $1.
Miner's Bee-Keeper's Manual. $1.
Norton's Elements of Scientific Agriculture. 50 cents.
Poultry Book, by Bennett. 75 cents.
Rural Economy, by Boussingault. $1 25.
Scientific Agriculture, by Rodgers. 75 cents.
Stable Economy, by Stewart. $1.
The Bird Fancier. 50 cents.
Treatise on Milch Cows. 38 cts.
Trees of America. $4.
Youatt on the Pig. 75 cents.

ALSO,

2 setts Chamber's Miscellany. $8 per sett.

*** These books can be safely forwarded by mail, to any part of the country.

☞ Orders from a distance will receive prompt attention, and the books forwarded by mail or Express as desired

Timothy and Clover Seed for Sale

AT the Rochester Seed Store, Nos. 12 and 14 Front street.
Sept. 1. [9-2] JAMES P. FOGG.

SOME of our friends have thought they could not make additions to their clubs at the club price, and consequently have sent on the full price for single subscribers. This we do not ask. Additions can be made to any club during the year, at the club price.

First in Beauty and Value—Cheapest and Most Popular.

THE GENESEE FARMER,

A MONTHLY JOURNAL OF

AGRICULTURE AND HORTICULTURE,

ILLUSTRATED WITH NUMEROUS ENGRAVINGS OF

Farm Buildings, Domestic Animals, Implements, Fruits, &c.

VOLUME XI, FOR 1850.

DANIEL LEE & JAMES VICK, JR., EDITORS.

P. BARRY, Conductor of Horticultural Department.

Fifty Cents a Year, in Advance.

FIVE Copies for $2; Eight Copies for $3, and any larger number at the same rate.

☞ All subscriptions to commence with the year, and the entire volume supplied to all subscribers.

☞ POST-MASTERS, AGENTS, and all friends of improvement, are respectfully solicited to obtain and forward subscriptions.

Subscription money, if properly enclosed, may be sent (postpaid or free,) at the risk of the Publisher. Address to

DANIEL LEE.

December, 1849. *Rochester, New York*

STEREOTYPED BY JEWETT, THOMAS AND CO., BUFFALO, N. Y.